

**National Pollutant Discharge Elimination System (NPDES) Permit Program****PUBLIC NOTICE****NPDES Permit to Discharge to State Waters**

Ohio Environmental Protection Agency  
Permits Section  
50 West Town St., Suite 700  
P. O. Box 1049  
Columbus, Ohio 43216-1049  
(614) 644-2001

Public Notice No.: OEPA 17-12-018 DFT  
Date of Issue of Public Notice: Dec-12-2017  
Name and Address of Applicant: NEORSD Easterly WWTC, 3900 Euclid Avenue, Cleveland, OH, 44115

Name and Address of Facility  
Where Discharge Occurs: NEORSD Easterly WWTC, 14021 Lakeshore Boulevard,  
Cleveland, OH, 44110, Cuyahoga County

Outfall Flow and Location List: 001 155,000,000 GPD 41N 34' 27" -81W 35' 16"

Receiving Stream: Lake Erie

Nature of Business: Wastewater Treatment

Key parameters to be limited  
in the permit are as follows: Total Suspended Solids, Oil and Grease-Hexane Extr Method,  
Total Phosphorus, Total Residual Chlorine, Total (Low Level)  
Mercury, Ceriodaphnia dubia-Acute Toxicity, Ceriodaphnia  
dubia-Chronic Toxicity, Maximum pH, Minimum pH, CBOD 5-  
day, E. coli

On the basis of preliminary staff review and application of standards and regulations, the director of the Ohio Environmental Protection Agency will issue a permit for the discharge subject to certain effluent conditions and special conditions. The draft permit will be issued as a final action unless the director revises the draft after consideration of the record of a public meeting or written comments, or upon disapproval by the administrator of the U.S. Environmental Protection Agency. Any person may submit written comments on the draft permit and administrative record and may request a public hearing. A request for public hearing shall be in writing and shall state the nature of the issues to be raised. In appropriate cases, including cases where there is significant public interest, the director may hold a public hearing on a draft permit or permits prior to final issuance of the permit or permits. Following final action by the director, any aggrieved party has the right to appeal to the Environmental Review Appeals Commission.

Interested persons are invited to submit written comments upon the discharge permit. Comments should be submitted in person or by mail no later than 30 days after the date of this public notice. Comments should be delivered or mailed to both of the following locations: 1) Ohio Environmental Protection Agency, Lazarus Government Center, Division of Surface Water, Permits Processing Unit, 50 West Town St., Suite 700, P.O. Box 1049, Columbus, Ohio 43216-1049 and 2) Ohio Environmental Protection Agency, Northeast District Office 2110 East Aurora Road, Twinsburg, Ohio 44087.

The Ohio EPA permit number and public notice numbers should appear next to the above address on the envelope and on each page of any submitted comments. All comments received no later than 30 days after the date of this public notice will be considered.

*Proposed Water Quality Based Effluent Limitations:* This draft permit contains water quality based effluent limitation(s) (WQBELs). In accordance with Ohio Revised Code Section 6111.03(J)(3), the Director establishes WQBELs after considering, to the extent consistent with the Federal Water Pollution Control Act, evidence relating to the technical feasibility and economic reasonableness of removing the polluting properties from those wastes and to evidence relating to conditions calculated to result from that action and their relation to benefits to the people of the state and to accomplishment of the purposes of this chapter. This determination was made based on data and information available at the time the permit was drafted, which included the contents of the of the timely submitted National Pollutant Discharge Elimination System (NPDES) permit renewal application, along with any and all pertinent information available to the Director.

This public notice hereby allows the permittee to provide to the Director for consideration during this public comment period, additional site-specific pertinent and factual information with respect to the technical feasibility and economic reasonableness for achieving compliance with WQBEL(s). This information shall be submitted to the addresses listed above.

Should the applicant need additional time to review, obtain or develop site-specific pertinent and factual information with respect to the technical feasibility and economic reasonableness of achieving compliance with WQBEL(s), written notification for any additional time shall be sent no later than 30 days after the date of this public notice to the Director at the addresses listed above.

Should the applicant determine that compliance with a WQBEL is technically and/or economically unattainable, the permittee may submit an application for a variance to the applicable WQBEL in accordance with the terms and conditions set forth in Ohio Administrative Code (OAC) Rule 3745-33-07(D) no later than 30 days after the date of this public notice to the addresses listed above.

Alternately, the applicant may propose the development of site-specific water quality standard(s) pursuant to OAC Rule 3745-1-35. The permittee shall submit written notification to the Director regarding their intent to develop site-specific water quality standards for the pollutant at issue to the addresses listed above no later than 30 days after the date of this public notice.

The application, fact sheets, permit including effluent limitations, special conditions, comments received, and other documents are available for inspection and may be copied at a cost of 5 cents per page at the Ohio Environmental Protection Agency at the address shown on page one of this public notice any time between the hours of 8 a.m. and 4:30 p.m., Monday through Friday. Copies of the public notice are available at no charge at the same address. Individual NPDES draft permits that are in public notice are now available on DSW's web site: <http://www.epa.ohio.gov/dsw/permits/individuals/draftperm.aspx>

Mailing lists are maintained for persons or groups who desire to receive public notice for all applications in the state or for certain geographical areas. Persons or groups may also request copies of fact sheets, applications, or other documents pertaining to specific applications. Persons or groups may have their names put on such a list by making a written request to the agency at the address shown above.

Application No. OH0024643

Issue Date:

Effective Date:

Expiration Date: 5 Years (Proposed)

OHIO EPA  
DRAFT PERMIT  
SUBJECT TO REVISION

Ohio Environmental Protection Agency  
Authorization to Discharge Under the  
National Pollutant Discharge Elimination System

In compliance with the provisions of the Federal Water Pollution Control Act, as amended (33 U.S.C. 1251 et. seq., hereinafter referred to as the "Act"), and the Ohio Water Pollution Control Act (Ohio Revised Code Section 6111),

Northeast Ohio Regional Sewer District

is authorized by the Ohio Environmental Protection Agency, hereinafter referred to as "Ohio EPA," to discharge from the Easterly Wastewater Treatment Plant located at 14021 Lakeshore Blvd, Cleveland, Ohio, Cuyahoga County and discharging to Lake Erie (Lake Mile 1179.65) in accordance with the conditions specified in Parts I, II, III, IV, V, and VI of this permit.

This permit is conditioned upon payment of applicable fees as required by Section 3745.11 of the Ohio Revised Code.

This permit and the authorization to discharge shall expire at midnight on the expiration date shown above. In order to receive authorization to discharge beyond the above date of expiration, the permittee shall submit such information and forms as are required by the Ohio EPA no later than 180 days prior to the above date of expiration.

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Craig W. Butler  
Director

Total Pages: 73

# Part I, A. - FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. During the period beginning on the effective date and lasting until the expiration date, the permittee is authorized to discharge in accordance with the following limitations and monitoring requirements from the following outfall: 3PF00001001. See Part II, OTHER REQUIREMENTS, for locations of effluent sampling.

Table - Final Outfall - 001 - Final

Effluent Characteristic  Parameter	Discharge Limitations							Monitoring Requirements		
	Concentration Specified Units		Loading* kg/day					Measuring Frequency	Sampling Type	Monitoring Months
	Maximum	Minimum	Weekly	Monthly	Daily	Weekly	Monthly			
00010 - Water Temperature - C	-	-	-	-	-	-	-	1/Day	Maximum Indicating Thermometer	All
00300 - Dissolved Oxygen - mg/l	-	-	-	-	-	-	-	1/Day	Continuous	All
00530 - Total Suspended Solids - mg/l	-	-	30	20	-	17600	11734	4/Week	24hr Composite	All
00552 - Oil and Grease, Hexane Extr Method - mg/l	10	-	-	-	-	-	-	1 / 2 Weeks	Grab	All
00610 - Nitrogen, Ammonia (NH3) - mg/l	-	-	-	-	-	-	-	5/Week	24hr Composite	All
00625 - Nitrogen Kjeldahl, Total - mg/l	-	-	-	-	-	-	-	1 / 2 Weeks	24hr Composite	All
00630 - Nitrite Plus Nitrate, Total - mg/l	-	-	-	-	-	-	-	1 / 2 Weeks	24hr Composite	All
00665 - Phosphorus, Total (P) - mg/l	-	-	1.5	1.0	-	880	587	2/Week	24hr Composite	All
00671 - Orthophosphate, Dissolved (as P) - mg/l	-	-	-	-	-	-	-	1/Month	Grab	All
00981 - Selenium, Total Recoverable - ug/l	-	-	-	-	-	-	-	1/Month	24hr Composite	All
01074 - Nickel, Total Recoverable - ug/l	-	-	-	-	-	-	-	1/Month	24hr Composite	All
01094 - Zinc, Total Recoverable - ug/l	-	-	-	-	-	-	-	1/Month	24hr Composite	All
01113 - Cadmium, Total Recoverable - ug/l	-	-	-	-	-	-	-	1/Month	24hr Composite	All
01114 - Lead, Total Recoverable - ug/l	-	-	-	-	-	-	-	1/Month	24hr Composite	All
01118 - Chromium, Total Recoverable - ug/l	-	-	-	-	-	-	-	1/Month	24hr Composite	All
01119 - Copper, Total Recoverable - ug/l	-	-	-	-	-	-	-	1/Month	24hr Composite	All
01220 - Chromium, Dissolved Hexavalent - ug/l	-	-	-	-	-	-	-	1/Month	Grab	All

Effluent Characteristic  Parameter	Discharge Limitations							Monitoring Requirements		
	Concentration Specified Units		Loading* kg/day					Measuring Frequency	Sampling Type	Monitoring Months
	Maximum	Minimum	Weekly	Monthly	Daily	Weekly	Monthly			
31648 - E. coli - #/100 ml	-	-	-	-	-	-	-	1/Day	Grab	Summer
50047 - Flow, Peak Rate - MGD	-	-	-	-	-	-	-	When Disch.	24hr Total	All
50050 - Flow Rate - MGD	-	-	-	-	-	-	-	1/Day	Continuous	All
50060 - Chlorine, Total Residual - mg/l	0.038	-	-	-	-	-	-	1/Day	Multiple Grab	Summer
50060 - Chlorine, Total Residual - mg/l	0.038	-	-	-	-	-	-	When Disch.	Multiple Grab	Winter
50092 - Mercury, Total (Low Level) - ng/l	1700	-	-	2.90	1.0	-	0.0017	1 / 2 Weeks	Grab	All
51173 - Cyanide, Free (Low-Level) - ug/l	-	-	-	-	-	-	-	1/Month	Grab	All
61425 - Acute Toxicity, Ceriodaphnia dubia - TUa	1.0	-	-	-	-	-	-	2/Year	24hr Composite	Feb. and Aug.
61426 - Chronic Toxicity, Ceriodaphnia dubia - TUC	-	-	-	11.0	-	-	-	2/Year	24hr Composite	Feb. and Aug.
61427 - Acute Toxicity, Pimephales promelas - TUa	-	-	-	-	-	-	-	1/Year	24hr Composite	August
61428 - Chronic Toxicity, Pimephales promelas - TUC	-	-	-	-	-	-	-	1/Year	24hr Composite	August
61941 - pH, Maximum - S.U.	9.0	-	-	-	-	-	-	1/Day	Continuous	All
61942 - pH, Minimum - S.U.	-	6.0	-	-	-	-	-	1/Day	Continuous	All
70300 - Residue, Total Filterable - mg/l	-	-	-	-	-	-	-	1/Week	24hr Composite	All
80082 - CBOD 5 day - mg/l	-	-	22.5	15	-	13200	8800	3/Week	24hr Composite	All

Notes for Station Number 3PF00001001:

\* Effluent loadings are based on a dry-weather design flow capacity of 155 MGD. The sustained peak wet-weather Secondary Treatment capacity of the facility is 400 MGD.

a. Total residual chlorine - See Part II, Item J. The critical or maximum value shall be reported each day.

b. Total residual chlorine, winter months - "When discharging" means monitoring and reporting are required on days when the facility is chlorinating.

c. Mercury - See Part II, Items Q, U, V and W.

- d. Free cyanide - See Part II, Item R.
- e. Whole effluent toxicity - See Part II, Item X.
- f. pH - The critical (maximum and minimum) values shall be reported each day.
- g. pH minimum - See Part II, Item S.
- h. Flow Rate, Peak Flow Rate - See Part II, Item CC.
- i. Dissolved Orthophosphate - See Part II, Item DD.
- j. Facility-wide effluent limitations for E. coli are applied at Calculated Outfall 3PF00001099. The disinfection system shall be operated to achieve performance standards of 284/100 ml (7-day average geometric mean) and 126/100 ml (30-day average geometric mean). Flow-weighted E. coli monitoring results from this station shall be mathematically combined with the results from CEHRT Station 3PF00001602 and reported under Outfall 3PF0001099.

Part I, A. - FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

2. Calculated Outfall Monitoring. During the period beginning on the effective date and lasting until the expiration date, the permittee is authorized to discharge in accordance with the following limitations and monitoring requirements from the following outfall: 3PF00001099. See Part II, OTHER REQUIREMENTS, for locations of effluent sampling.

Table - Calculated Outfall/Station - 099 - Final

<u>Effluent Characteristic</u>	<u>Discharge Limitations</u>							<u>Monitoring Requirements</u>		
	Concentration Specified Units				Loading* kg/day			Measuring Frequency	Sampling Type	Monitoring Months
Parameter	Maximum	Minimum	Weekly	Monthly	Daily	Weekly	Monthly			
31648 - E. coli - #/100 ml	-	-	284	126	-	-	-	1/Day	Calculated	Summer
50050 - Flow Rate - MGD	-	-	-	-	-	-	-	1/Day	Calculated	Summer

Notes for Calculated Station Number 3PF00001099:

a. Effluent limitations for E. coli are established as facility-wide limits. E. coli monitoring results from Outfall 3PF00001001 and CEHRT Station 3PF00001602 shall be mathematically combined and reported under this station. A flow-weighted calculation shall be performed using the contributing daily flows from Outfall 3PE00001001 and CEHRT Station 3PF00001602.

## Part I, A. - FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

3. CEHRT System Monitoring. During the period beginning on the effective date and lasting until the expiration date, the permittee is authorized to discharge in accordance with the following limitations and monitoring requirements from the following internal monitoring station: 3PF00001602. See Part II, OTHER REQUIREMENTS, for locations of effluent sampling.

Table - Internal Monitoring Station - 602 - Final

Effluent Characteristic  Parameter	Discharge Limitations							Monitoring Requirements		
	Concentration Specified Units		Loading* kg/day					Measuring Frequency	Sampling Type	Monitoring Months
	Maximum	Minimum	Weekly	Monthly	Daily	Weekly	Monthly			
00400 - pH - S.U.	9.0	6.0	-	-	-	-	-	When Disch.	Grab	All
00530 - Total Suspended Solids - mg/l	40	-	-	-	-	-	-	When Disch.	Calculated	All
00610 - Nitrogen, Ammonia (NH3) - mg/l	-	-	-	-	-	-	-	When Disch.	Composite	All
00665 - Phosphorus, Total (P) - mg/l	-	-	-	-	-	-	-	When Disch.	Composite	All
31648 - E. coli - #/100 ml	-	-	-	-	-	-	-	When Disch.	Grab	Summer
50050 - Flow Rate - MGD	-	-	-	-	-	-	-	When Disch.	24hr Total	All
50060 - Chlorine, Total Residual - mg/l	0.038	-	-	-	-	-	-	When Disch.	Grab	Summer
80082 - CBOD 5 day - mg/l	-	-	-	-	-	-	-	When Disch.	Composite	All
82517 - Duration of Discharge - Hours	-	-	-	-	-	-	-	When Disch.	24hr Total	All

Notes for Station Number 3PF00001602:

a. The discharge from the proposed Chemically Enhanced High Rate (CEHRT) Treatment System is approved as an anticipated CSO-related bypass. The effluent limitations and monitoring requirements become effective upon Achievement of Full Operation as defined in the July 7, 2011 approved federal court consent decree (U.S. District Court, Northern District of Ohio, Case no. 1:10 CV2895-DCN).

b. A CSO-related bypass of the treatment plant is approved when the flow rate to the POTW, as a result of a precipitation event, exceeds 400 MGD (or equivalent GPM). Bypasses that occur when the flow at the time of the bypass is under the specified flow rate are not approved under this condition and are subject to the bypass provision at 40 CFR 122.41(m). In the event of a CSO-related bypass approved under this condition, the permittee shall minimize the discharge of pollutants to the environment. At a minimum, CSO-related bypass flows must receive enhanced primary clarification, solids and floatables removal, and disinfection. The permittee shall report any substantial changes in the volume or character of pollutants being introduced into the POTW. Approval of CSO-related bypasses under this provision may be modified or terminated when there is a substantial change in the volume or character of pollutants being introduced to the POTW.



- c. The permittee shall provide notice to Ohio EPA of bypasses approved under this provision within 24 hours of occurrence of the bypass.
- d. "When discharging" means monitoring and reporting for the repective parameters are required on days when the chemically-enhanced high-rate treatment (CEHRT) system is operating and wastewater is being discharged from this station to Outfall 3PF00001002.
- e. Sampling shall commence no later than two (2) hours after a discharge has begun to occur at this station. Samples are not required for discharges lasting less than two (2) hours. The two hour delay does not apply to flow monitoring.
- f. A Discharge Monitoring Report (DMR) for this station must be submitted every month. If there are no discharges during the entire month, select the "No Discharge" check box on the data entry form and PIN the eDMR.
- g. Facility-wide effluent limitations for E. coli are applied at Calculated Outfall 3PF00001099. The CEHRT system shall be operated to achieve performance standards of 284/100 ml (averaged across 7 consecutive discharge events) and 126/100 ml (long-term recreation season geomean). Flow-weighted E. coli monitoring results from this station and outfall 3PF00001001 shall be mathematically combined and reported under Outfall 3PF00001099. The permittee shall develop a Standard Operating Procedure for E. coli sampling and analyses for the CEHRT system. The data substitution code "AH", with an appropriate explanation (e.g. unavailablity of qualified laboratory personnel) may be utilized in certain situations when a collected sample is not analyzed.
- h. The "Maximum" concentration limitation for total suspended solids represents a calculated 7-activation event rolling average (i.e. the average of 7 consecutive CEHRTdischarge events). The average concentration of the composite samples for the corresponding 7-event period shall be calculated and reported on the day of the seventh activation. The permittee shall also maintain analytical records of each individual discharge event.

Part I, B. - WET WEATHER OVERFLOW/BYPASS MONITORING LIMITATIONS AND MONITORING REQUIREMENTS

1. Wet Weather Treatment/Bypass Monitoring. During the period beginning on the effective date and lasting until the expiration date, the permittee shall monitor the wet-weather overflow/bypass when discharging at Station Number 3PF00001002, and report to the Ohio EPA in accordance with the following table. See Part II, OTHER REQUIREMENTS, for location of sampling.

Table - Bypass Monitoring - 002 - Final

<u>Effluent Characteristic</u>	<u>Discharge Limitations</u>							<u>Monitoring Requirements</u>		
	Concentration Specified Units				Loading* kg/day			Measuring	Sampling	Monitoring
Parameter	Maximum	Minimum	Weekly	Monthly	Daily	Weekly	Monthly	Frequency	Type	Months
51500 - Flow Volume, Total - Million Gallons	-	-	-	-	-	-	-	When Disch.	24hr Total	All
82517 - Duration of Discharge - Hours	-	-	-	-	-	-	-	When Disch.	Total	All

Notes for Station Number 3PF00001002:

- a. The discharge at this outfall is comprised of the CEHRT effluent (Station Number 3PF00001602) and any associated bypass events at the treatment plant headworks (Station Number 3PF00001603).
- b. Data for flow volume may be estimated if a measuring device is not available.
- c. Discharges through this station during dry weather are prohibited except as described by federal regulation at 40 CFR 122.41(m) and Part III, Item 11, General Conditions, of this permit.
- d. A Discharge Monitoring Report (DMR) for this station must be submitted every month. If there are no discharges during the entire month, select the "No Discharge" check box on the data entry form and PIN the eDMR.

Part I, B. - BYPASS MONITORING LIMITATIONS AND MONITORING REQUIREMENTS

2. Bypass Monitoring. During the period beginning on the effective date and lasting until the expiration date, the permittee shall monitor the treatment plant's bypass when discharging, at Station Number 3PF00001003, and report to the Ohio EPA in accordance with the following table. See Part II, OTHER REQUIREMENTS, for location of sampling.

Table - Bypass Monitoring - 003 - Final

Effluent Characteristic  Parameter	Discharge Limitations							Monitoring Requirements		
	Concentration Specified Units				Loading* kg/day			Measuring Frequency	Sampling Type	Monitoring Months
	Maximum	Minimum	Weekly	Monthly	Daily	Weekly	Monthly			
00051 - Bypass Occurrence - No./Day	-	-	-	-	-	-	-	When Disch.	24hr Total	All
00052 - Bypass Total Hours Per Day - Hrs/Day	-	-	-	-	-	-	-	When Disch.	24hr Total	All
00530 - Total Suspended Solids - mg/l	-	-	-	-	-	-	-	When Disch.	Grab	All
31648 - E. coli - #/100 ml	-	-	-	-	-	-	-	When Disch.	Grab	Summer
51428 - Bypass Volume - MGAL	-	-	-	-	-	-	-	When Disch.	24hr Total	All
80082 - CBOD 5 day - mg/l	-	-	-	-	-	-	-	When Disch.	Grab	All

Notes for Station Number 3PF00001003:

- a. The discharge at this station is comprised of the emergency bypass after the Primary Settling Tanks.
- b. Data for 24 hour total flow, bypass occurrence, and bypass duration may be estimated if a measuring device is not available.
- c. Bypass Occurrence: If a discharge from this station occurs intermittently during a day, starting and stopping several times, report "1" for that day. If a discharge from this station occurs on more than one day but is the result of a continuing precipitation event, it should be counted as one occurrence: Report "1" on the first day of the discharge.
- d. Discharge through this station is prohibited. The Director may take enforcement action for violations of this prohibition unless the conditions specified at 40 CFR 122.41(m) and in Part III, Item 11.C.1 of this permit are met.

Part I, B. - SSO MONITORING EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

3. SSO Monitoring. During the period beginning on the effective date and lasting until the expiration date, the permittee shall monitor at Station Number 3PF00001300, and report to the Ohio EPA in accordance with the following table. See Part II, OTHER REQUIREMENTS, for location of sampling.

Table - SSO Monitoring - 300 - Final

<u>Effluent Characteristic</u>	<u>Discharge Limitations</u>							<u>Monitoring Requirements</u>		
	Concentration Specified Units		Loading* kg/day					Measuring	Sampling	Monitoring
Parameter	Maximum	Minimum	Weekly	Monthly	Daily	Weekly	Monthly	Frequency	Type	Months
74062 - Overflow Occurrence - No./Month	-	-	-	-	-	-	-	1/Month	Total	All

Notes for Station Number 3PF00001300:

- a. A sanitary sewer overflow is an overflow, spill, release, or diversion of wastewater from a sanitary sewer system. These overflows shall be monitored when they discharge. Only sanitary sewer overflows that enter waters of the state, either directly or through a storm sewer or other conveyance, must be reported under this monitoring station.
- b. For the purpose of counting occurrences, each location on the sanitary sewer system where there is an overflow, spill, release, or diversion of wastewater on a given day that enters waters of the state is counted as one occurrence. For example, if on a given day overflows occur from a manhole at one location and from a damaged pipe at another location and they both enter waters of the state, record two occurrences for that day. If overflows from both locations continue on the following day, record two occurrences for the following day. At the end of the month, total the daily occurrences and report this number in the first column of the first day of the month on the 4500 form. If there are no overflows during the entire month, report "zero" (0).
- c. All sanitary sewer overflows are prohibited.
- d. See Part II, Items D and E.

Part I, B. - SLUDGE MONITORING REQUIREMENTS

4. Sludge Monitoring. During the period beginning on the effective date and lasting until the expiration date, the permittee shall monitor the treatment works' final sludge at Station Number 3PF00001588, and report to the Ohio EPA in accordance with the following table. See Part II, OTHER REQUIREMENTS, for location of sludge sampling.

Table - Sludge Monitoring - 588 - Final

<u>Effluent Characteristic</u>	<u>Discharge Limitations</u>							<u>Monitoring Requirements</u>		
	Concentration Specified Units		Loading* kg/day					Measuring	Sampling	Monitoring
Parameter	Maximum	Minimum	Weekly	Monthly	Daily	Weekly	Monthly	Frequency	Type	Months
70316 - Sludge Weight - Dry Tons	-	-	-	-	-	-	-	1/Year	Total	December

Notes for Station Number 3PF00001588:

- Monitoring is required when sewage sludge is removed from the wastewater treatment facility and disposed of by pumping to the Southerly WWTC. The total sludge weight transferred for the entire year shall be reported on the December Discharge Monitoring Report (DMR).
- If no sewage sludge is removed from the permittee's facility during the year, eDMR users should select the "No Discharge" check box on the data entry form and PIN the eDMR.
- Sludge weight is a calculated total for the year. To convert from gallons of liquid sewage sludge to dry tons of sewage sludge: dry tons= gallons x 8.34 (lbs/gallon) x 0.0005 (tons/lb) x decimal fraction total solids.
- See Part II, Items M and N.

## Part I, B. - INFLUENT MONITORING REQUIREMENTS

5. Influent Monitoring. During the period beginning on the effective date and lasting until the expiration date, the permittee shall monitor the treatment works' influent wastewater at Station Number 3PF00001601, and report to the Ohio EPA in accordance with the following table. Samples of influent used for determination of net values or percent removal must be taken the same day as those samples of effluent used for that determination. See Part II, OTHER REQUIREMENTS, for location of influent sampling.

Table - Influent Monitoring - 601 - Final

Effluent Characteristic  Parameter	Discharge Limitations							Monitoring Requirements		
	Concentration Specified Units		Loading* kg/day					Measuring Frequency	Sampling Type	Monitoring Months
	Maximum	Minimum	Weekly	Monthly	Daily	Weekly	Monthly			
00530 - Total Suspended Solids - mg/l	-	-	-	-	-	-	-	4/Week	24hr Composite	All
00720 - Cyanide, Total - mg/l	-	-	-	-	-	-	-	1/Month	Grab	All
00981 - Selenium, Total Recoverable - ug/l	-	-	-	-	-	-	-	1/Month	24hr Composite	All
01074 - Nickel, Total Recoverable - ug/l	-	-	-	-	-	-	-	1/Month	24hr Composite	All
01094 - Zinc, Total Recoverable - ug/l	-	-	-	-	-	-	-	1/Month	24hr Composite	All
01113 - Cadmium, Total Recoverable - ug/l	-	-	-	-	-	-	-	1/Month	24hr Composite	All
01114 - Lead, Total Recoverable - ug/l	-	-	-	-	-	-	-	1/Month	24hr Composite	All
01118 - Chromium, Total Recoverable - ug/l	-	-	-	-	-	-	-	1/Month	24hr Composite	All
01119 - Copper, Total Recoverable - ug/l	-	-	-	-	-	-	-	1/Month	24hr Composite	All
01220 - Chromium, Dissolved Hexavalent - ug/l	-	-	-	-	-	-	-	1/Month	Grab	All
50092 - Mercury, Total (Low Level) - ng/l	-	-	-	-	-	-	-	1/Month	Grab	All
61941 - pH, Maximum - S.U.	-	-	-	-	-	-	-	1/Day	Continuous	All
61942 - pH, Minimum - S.U.	-	-	-	-	-	-	-	1/Day	Continuous	All
80082 - CBOD 5 day - mg/l	-	-	-	-	-	-	-	3/Week	24hr Composite	All

Notes for Station Number 3PF00001601:

- Sampling shall be performed on the same day as Outfall 3PF00001001.
- Mercury - See Part II, Items Q, U, V and W.
- pH - The critical (maximum and minimum) values shall be reported each day.

## Part I, B. - BYPASS MONITORING LIMITATIONS AND MONITORING REQUIREMENTS

6. Wet Weather Overflow/Bypass Monitoring. During the period beginning on the effective date and lasting until the expiration date, the permittee shall monitor the treatment plant's bypass/overflow when discharging, at Station Number 3PF00001603, and report to the Ohio EPA in accordance with the following table. See Part II, OTHER REQUIREMENTS, for location of sampling.

Table - Bypass Monitoring - 603 - Final

Effluent Characteristic  Parameter	Discharge Limitations							Monitoring Requirements		
	Concentration Specified Units				Loading* kg/day			Measuring Frequency	Sampling Type	Monitoring Months
	Maximum	Minimum	Weekly	Monthly	Daily	Weekly	Monthly			
00051 - Bypass Occurrence - No./Day	-	-	-	-	-	-	-	When Disch.	24hr Total	All
00052 - Bypass Total Hours Per Day - Hrs/Day	-	-	-	-	-	-	-	When Disch.	Total	All
00530 - Total Suspended Solids - mg/l	-	-	-	-	-	-	-	When Disch.	Grab	All
31648 - E. coli - #/100 ml	-	-	-	-	-	-	-	When Disch.	24hr Total	Summer
51428 - Bypass Volume - MGAL	-	-	-	-	-	-	-	When Disch.	24hr Total	All
80082 - CBOD 5 day - mg/l	-	-	-	-	-	-	-	When Disch.	Grab	All

Notes for Station Number 3PF00001603:

- The discharge at this station is comprised of any untreated wet weather overflows or associated emergency bypass events at the treatment plant headworks to Outfall 3PF0001002.
- Monitoring and sampling shall be conducted and reported on each day that there is a discharge through this station.
- Data for 24 hour total flow, bypass occurrence, and bypass duration may be estimated if a measuring device is not available.
- Bypass Occurrence: If a discharge from this station occurs intermittently during a day, starting and stopping several times, report "1" for that day. If a discharge from this station occurs on more than one day but is the result of a continuing precipitation event, it should be counted as one occurrence: Report "1" on the first day of the discharge.
- The permittee shall follow its Standard Operating Procedure for E. coli sampling and report "AH" with an appropriate explanation when a sample is not collected and/or analyzed.
- A Discharge Monitoring Report (DMR) for this station must be submitted every month. If there are no discharges during the entire month, select the "No Discharge" check box on the data entry form and PIN the eDMR.

g. Discharges through this station during dry weather are prohibited except as described by federal regulation at 40 CFR 122.41(m) and Part III, Item 11, General Conditions, of this permit.



## Part I, C - Schedule of Compliance

### A. Municipal Pretreatment Schedule

1. The permittee shall evaluate the adequacy of local industrial user limitations to prevent the introduction of pollutants into the POTW which will interfere with the operation of the POTW, pass through the POTW in amounts that exceed water quality standard-based limits, be incompatible with the POTW, or limit wastewater or sludge use options. Technical justification for revising local industrial user limitations to attain compliance with final table limits, along with a pretreatment program modification request, or technical justification for retaining existing local industrial user limitations shall be submitted to Ohio EPA, Central Office Pretreatment Unit and to Ohio EPA, Northeast District Office, as soon as possible, but no later than 6 months from the effective date of this permit. (Event Code 52599)

Technical justification is required for arsenic, cadmium, total chromium, dissolved hexavalent chromium, copper, free cyanide, lead, mercury, molybdenum, nickel, selenium, silver, and zinc unless screening of wastewater and sludge indicate these pollutants are not present in significant amounts. Technical justification is also required for any other pollutants where a local limit may be necessary to protect against pass through, interference or sludge disposal.

To demonstrate technical justification for new local industrial user limits or justification for retaining existing limits, a local limits technical justification report shall be submitted to Ohio EPA. The report shall be consistent with the guidance, procedures and methodologies found in Ohio EPA's and USEPA's local limits guidance documents available at <http://epa.ohio.gov/dsw/pretreatment/guidance.aspx>.

The report shall include the following:

- a. Identification of and justification for pollutants of concern for which local limits will be developed.
- b. Treatment plant flow and industrial flows to which local limits will be applied. If the POTW is accepting any hauled waste include for each type of hauled waste (e.g. landfill leachate, septage), at least 5 data points detailing the dates and volumes of discharge and sampling results for all the pollutants of concern.
- c. Domestic/background concentrations. To determine domestic/background concentrations, the permittee shall, at a minimum, sample at three different locations for five consecutive days or two different locations for seven consecutive days. These locations shall, to the extent possible, convey only domestic wastewater.
- d. Treatment plant removal efficiencies. Whenever possible, site specific removal efficiencies shall be determined using actual plant data with analytical detection levels that are sensitive enough to provide values above the reporting level (RL) or practical quantification limit (PQL).

e. A comparison of maximum allowable headworks loadings based on all applicable criteria. Criteria may include sludge disposal, NPDES permit limits, waste load allocation values, and interference with biological processes such as activated sludge, sludge digestion, nitrification, etc. Calculation tables can be found on the Ohio EPA website at <http://www.epa.ohio.gov/dsw/pretreatment/guidance.aspx>.

f. If revised industrial user discharge limits are proposed, the method of allocating available pollutant loads to industrial users.

g. If narrative or best management practices (BMPs) are proposed as local limits, information on how they will be implemented. When appropriate, industrial user discharge limits may include narrative local limits requiring industrial users to develop and implement BMPs. These narrative local limits may be used either alone or as a supplement to numeric limits.

h. Supporting data, assumptions, and methodologies used in establishing the information in item 1.a through 1.g above.

i. If new or revised industrial user discharge limits are proposed, the stamp and signature of a licensed Ohio professional engineer.

2. Revisions. The permittee shall submit a revised local limit technical justification report within 90 days of receiving notification from Ohio EPA of deficiencies in the submitted report.

3. If revisions to local industrial user limitations including best management practices are determined to be necessary, the permittee shall incorporate revised local industrial user limitations in all industrial user control documents, as applicable, no later than 4 months after the date of Ohio EPA's approval.

#### 4. Sampling Methods

a. Mercury: If the permittee uses EPA Method 245.1 or 245.2 to sample domestic background locations and mercury concentrations are below detection, the permittee shall use EPA method 1631 or 245.7 to quantify domestic background contributions of mercury.

b. Free Cyanide: The permittee shall use ASTM D7237 or OIA-1677-09 - flow injection followed by gas diffusion amperometry to quantify domestic background contributions of free cyanide.

#### B. Evaluation for Reducing Discharge of Phosphorus

The permittee shall fill out and submit the Evaluation for Reducing Discharge of Phosphorus Form found at the Internet site <http://epa.ohio.gov/dsw/permits/npdesform.aspx> which reports on the overall progress towards reducing the final effluent concentration of nutrients attached with the submittal of the future permit renewal application.

## Part II, Other Requirements

### A. Operator Certification Requirements

#### 1. Classification

- a. In accordance with Ohio Administrative Code 3745-7-04, the sewage treatment facility at this facility shall be classified as a Class IV facility.
- b. All sewerage (collection) systems that are tributary to this treatment works are Class II sewerage systems in accordance with paragraph (B)(1)(a) of rule 3745-7-04 of the Ohio Administrative Code.

#### 2. Operator of Record

- a. The permittee shall designate one or more operator of record to oversee the technical operation of the treatment works and sewerage (collection) system in accordance with paragraph (A)(2) of rule 3745-7-02 of the Ohio Administrative Code.
- b. Each operator of record shall have a valid certification of a class equal to or greater than the classification of the treatment works as defined in Part II, Item A.1 of this NPDES permit.
- c. Within three days of a change in an operator of record, the permittee shall notify the Director of the Ohio EPA of any such change on a form acceptable to Ohio EPA. The appropriate form can be found at the following website:

<http://epa.ohio.gov/Portals/28/documents/opcert/Operator%20of%20Record%20Notification%20Form.pdf>

- d. Within 60 days of the effective date of this permit, the permittee shall notify the Director of Ohio EPA of the operators of record on a form acceptable to Ohio EPA.
- e. The operator of record for a class II, III, or IV treatment works or class II sewerage system may be replaced by a backup operator with a certificate one classification lower than the treatment works or sewerage system for a period of up to thirty consecutive days. The use of this provision does not require notification to the agency.
- f. Upon proper justification, such as military leave or long term illness, the director may authorize the replacement of the operator of record for a class II, III, or IV treatment works or class II sewerage system by a backup operator with a certificate one classification lower than the facility for a period of greater than thirty consecutive days. Such requests shall be made in writing to the appropriate district office.

### 3. Minimum Staffing Requirements

a. The permittee shall ensure that the treatment works operator of record is physically present at the facility in accordance with the minimum staffing requirements per paragraph (C)(1) of rule 3745-7-04 of the Ohio Administrative Code or the requirements from an approved 3745-7-04(C) minimum staffing hour reduction plan.

b. Sewerage (collection) system Operators of Record are not required to meet minimum staffing requirements in paragraph (C)(1) of rule 3745-7-04 of the Ohio Administrative Code.

c. If Ohio EPA approves a reduction in minimum staffing requirements based upon a facility operating plan, any change in the criteria under which the operating plan was approved (such as enforcement status, history of noncompliance, or provisions included in the plan) will require that the treatment works immediately return to the minimum staffing requirements included in paragraph (C)(1) of rule 3745-7-04 of the Ohio Administrative Code.

B. Description of the location of the required sampling stations are as follows:

Sampling Station	Description of Location
3PF00001001	Final effluent
.	(Lat: 41 N 34' 27"; Long: 81 W 35' 16")
3PF00001002	Combined discharge to Lake Erie from Stations 3PF00001602
.	and/or 3PF00001603
.	(Lat: 41N 34' 18"; Long: 81 W 35' 29")
3PF00001003	Emergency bypass after the Primary Settling Tanks
3PF00001099	Calculated Outfall
3PF00001300	System wide sanitary sewer overflows from sewers owned
.	or operated by NEORSD
3PF00001588	Sludge pumped to NEORSD Southerly WWTC
3PF00001601	Plant influent
3PF00001602	Treated CEHRT discharge to Outfall 3PF00001002
3PF00001603	Wet-weather headworks overflow/bypass to Outfall 3PF00001002

C. All parameters, except flow and any other continuously-recorded parameters, need not be monitored on days when the plant is not normally staffed (Saturdays, Sundays, and Holidays). On those days, report "AN" on the Discharge Monitoring Report (See Part III.4.E).

### D. Sanitary Sewer Overflow (SSO) Reporting Requirements

A sanitary sewer overflow is an overflow, spill, release, or diversion of wastewater from a sanitary sewer system. SSOs do not include wet weather discharges from combined sewer overflows specifically listed in Part II of this NPDES permit (if any). All SSOs are prohibited.

## 1. Reporting for SSOs That Imminently and Substantially Endanger Human Health

### a) Immediate Notification

You must notify Ohio EPA (1-800-282-9378) and the appropriate Board of Health (i.e., city or county) within 24 hours of learning of any SSO from sewers that you own or operate that may imminently and substantially endanger human health. The telephone report must identify the location, estimated volume and receiving water, if any, of the overflow. An SSO that may imminently and substantially endanger human health includes dry weather overflows, major line breaks, overflow events that result in fish kills or other significant harm, overflows that expose the general public to contact with raw sewage, and overflow events that occur in sensitive waters and high exposure areas such as protection areas for public drinking water intakes and waters where primary contact recreation occurs.

### b) Follow-Up Written Report

Within 5 days of the time you become aware of any SSO from sewers that you own or operate that may imminently and substantially endanger human health, you must provide the appropriate Ohio EPA district office a written report that includes:

- (i) the estimated date and time when the overflow began and stopped or will be stopped (if known);
- (ii) the location of the SSO including an identification number or designation if one exists;
- (iii) the receiving water (if there is one);
- (iv) an estimate of the volume of the SSO (if known);
- (v) a description of the sewer system component from which the release occurred (e.g., manhole, constructed overflow pipe, crack in pipe);
- (vi) the cause or suspected cause of the overflow;
- (vii) steps taken or planned to reduce, eliminate, and prevent reoccurrence of the overflow and a schedule of major milestones for those steps; and
- (viii) steps taken or planned to mitigate the impact(s) of the overflow and a schedule of major milestones for those steps.

An acceptable 5-day follow-up written report can be filled-in or downloaded from the Ohio EPA Division of Surface Water Permits Program Technical Assistance Web page at [http://www.epa.ohio.gov/dsw/permits/technical\\_assistance.aspx](http://www.epa.ohio.gov/dsw/permits/technical_assistance.aspx) .

## 2. Reporting for All SSOs from Sewers You Own or Operate, Including Those That Imminently and Substantially Endanger Human Health

### a) Discharge Monitoring Reports (DMR)

Sanitary sewer overflows that enter waters of the state, either directly or through a storm sewer or other conveyance, shall be reported on your Discharge Monitoring Reports (DMR). You must report the system-wide number of occurrences for SSOs that enter waters of the state in accordance with the requirements for station number 300. A monitoring table for this station is included in Part I, B of this NPDES permit. For the purpose of counting occurrences, each location on the sanitary sewer system where there is an overflow, spill, release, or diversion of wastewater on a given day is counted as one occurrence. For example, if on a given day overflows occur from a manhole at one location and from a damaged pipe at another location and they both enter waters of the state, you should record two occurrences for that day. If overflows from both locations continue on the following day, you should record two occurrences for the following day. At the end of the month, total the daily occurrences from all locations on your system and report this number using reporting code 74062 (Overflow Occurrence, No./Month) on the 4500 form for station number 300.

### b) Annual Report

You must prepare an annual report of all SSOs in sewers that you own or operate, including those that do not enter waters of the state. The annual report must be in an acceptable format (see below) and must include:

- (i) A table that lists an identification number, a location description, and the receiving water (if any) for each existing SSO. If an SSO previously included in the list has been eliminated, this shall be noted. Assign each SSO location a unique identification by numbering them consecutively, beginning with 301.
- (ii) A table that lists the date that an overflow occurred, the unique ID of the overflow, the name of affected receiving waters (if any), and the estimated volume of the overflow (in millions of gallons). The annual report may summarize information regarding overflows of less than approximately 1,000 gallons.
- (iii) A table that summarizes the occurrence of water in basements (WIBs) by total number and by sewershed. The report shall include a narrative analysis of WIB patterns by location, frequency and cause. Only WIBs caused by a problem in the publicly-owned collection system that you own or operate must be included.

Not later than March 31 of each year, you must submit one copy of the annual report for the previous calendar year to the appropriate Ohio EPA district office and one copy to: Ohio EPA; Division of Surface Water; NPDES Permit Unit; P.O. Box 1049; Columbus, OH, 43216-1049. You also must provide adequate notice to the public of the availability of the report. Adequate public notice would include: notices posted at the community administration building, the public library and the post office; a public notice in the newspaper; or a notice sent out with all sewer bills.

An acceptable annual SSO report can be filled-in or downloaded from the Ohio EPA Division of Surface Water Permits Program Technical Assistance Web page at [http://www.epa.ohio.gov/dsw/permits/technical\\_assistance.aspx](http://www.epa.ohio.gov/dsw/permits/technical_assistance.aspx).

E. The permittee shall maintain in good working order and operate as efficiently as possible the "treatment works" and "sewerage system" as defined in ORC 6111.01 to achieve compliance with the terms and conditions of this permit and to prevent discharges to the waters of the state, surface of the ground, basements, homes, buildings, etc.

F. Composite samples shall be comprised of a series of grab samples collected over a 24-hour period (or the period of discharge for non-continuous stations) and proportionate in volume to the sewage flow rate at the time of sampling. Such samples shall be collected at such times and locations, and in such a fashion, as to be representative of the facility's overall performance.

G. Grab samples shall be collected at such times and locations, and in such fashion, as to be representative of the facility's performance.

H. Multiple grab samples shall be comprised of at least three grab samples collected at intervals of at least three hours during the period that the plant is staffed on each day for sampling. Samples shall be collected at such times and locations, and in such fashion, as to be representative of the facility's overall performance. The critical value shall be reported.

I. The treatment works must obtain at least 85 percent removal of carbonaceous biochemical oxygen demand (five-day) and suspended solids (see Part III, Item 1).

J. The parameters below have had effluent limitations established that are below the Ohio EPA Quantification Level (OEPA QL) for the approved analytical procedure promulgated at 40 CFR 136. OEPA QLs may be expressed as Practical Quantification Levels (PQL) or Minimum Levels (ML).

Compliance with an effluent limit that is below the OEPA QL is determined in accordance with ORC Section 6111.13 and OAC Rule 3745-33-07(C). For maximum effluent limits, any value reported below the OEPA QL shall be considered in compliance with the effluent limit. For average effluent limits, compliance shall be determined by taking the arithmetic mean of values reported for a specified averaging period, using zero (0) for any value reported at a concentration less than the OEPA QL, and comparing that mean to the appropriate average effluent limit. An arithmetic mean that is less than or equal to the average effluent limit shall be considered in compliance with that limit.

The permittee must utilize the lowest available detection method currently approved under 40 CFR Part 136 for monitoring these parameters.

#### REPORTING:

All analytical results, even those below the OEPA QL (listed below), shall be reported. Analytical results are to be reported as follows:

1. Results above the QL: Report the analytical result for the parameter of concern.
2. Results above the MDL, but below the QL: Report the analytical result, even though it is below the QL.
3. Results below the MDL: Analytical results below the method detection limit shall be reported as "below detection" using the reporting code "AA".

The following table of quantification levels will be used to determine compliance with NPDES permit limits:

Parameter	PQL	ML
Chlorine, tot. res.	0.050 mg/l	--

This permit may be modified, or, alternatively, revoked and reissued, to include more stringent effluent limits or conditions if information generated as a result of the conditions of this permit indicate the presence of these pollutants in the discharge at levels above the water quality based effluent limit (WQBEL).



K. POTWs that accept hazardous wastes by truck, rail, or dedicated pipeline are considered to be hazardous waste treatment, storage, and disposal facilities (TSDFs) and are subject to regulation under the Resource Conservation and Recovery Act (RCRA). Under the "permit-by-rule" regulation found at 40 CFR 270.60(c), a POTW must:

- 1) comply with all conditions of its NPDES permit,
- 2) obtain a RCRA ID number and comply with certain manifest and reporting requirements under RCRA,
- 3) satisfy corrective action requirements, and
- 4) meet all federal, state, and local pretreatment requirements.

L. Water quality based permit limitations in this permit may be revised based on updated wasteload allocations or use designation rules. This permit may be modified, or revoked and reissued, to include new water quality based effluent limits or other conditions that are necessary to comply with a revised wasteload allocation, or an approved total maximum daily loads (TMDL) report as required under Section 303 (d) of the Clean Water Act.

M. All disposal, use, storage, or treatment of sewage sludge by the Permittee shall comply with Chapter 6111. of the Ohio Revised Code, Chapter 3745-40 of the Ohio Administrative Code, any further requirements specified in this NPDES permit, and any other actions of the Director that pertain to the disposal, use, storage, or treatment of sewage sludge by the Permittee.

N. No later than March 1 of each calendar year, the Permittee shall submit a report summarizing the sewage sludge disposal, use, storage, or treatment activities of the Permittee during the previous calendar year. The report shall be submitted through the Ohio EPA eBusiness Center, Division of Surface Water NPDES Permit Applications service.

O. "Reserved"

P. "Reserved"

Q. The permittee shall use EPA Method 1631 promulgated under 40 CFR 136 to comply with the influent and effluent mercury monitoring requirements of this permit.

R. Cyanide Low Level Method

This permit no longer authorizes the use of method 4500 CN-I from Standard Methods for free cyanide testing. Currently there are two approved methods for free cyanide listed in 40 CFR 136 that have a quantification level lower than any water quality-based effluent limits: ASTM D7237-10 and OIA-1677-09. The permittee shall begin using one of these approved methods as soon as possible. If you must use method 4500 CN-I during the transition to an approved method, report the results on your DMR and enter "Method 4500 CN-I" in the remarks section.

S. The limitation for pH (Minimum) is based on a mixing zone analyses submitted by the permittee. The analyses demonstrated that this limitation is protective of the water quality standard within the mixing zone. The permittee shall justify continuation of the limitation, or an alternative limitation, with each permit renewal application.

T. The permittee shall maintain a permanent marker on the stream bank at each outfall that is regulated under this NPDES permit. This includes final outfalls, bypasses, and combined sewer overflows. The marker shall consist at a minimum of the name of the establishment to which the permit was issued, the Ohio EPA permit number, and the outfall number and a contact telephone number. The information shall be printed in letters not less than two inches in height. The marker shall be a minimum of 2 feet by 2 feet and shall be a minimum of 3 feet above ground level. The sign shall be not be obstructed such that persons in boats or persons swimming on the river or someone fishing or walking along the shore cannot read the sign. Vegetation shall be periodically removed to keep the sign visible. If the outfall is normally submerged the sign shall indicate that. If the outfall is a combined sewer outfall, the sign shall indicate that untreated human sewage may be discharged from the outfall during wet weather and that harmful bacteria may be present in the water.

#### U. General Mercury Variance Renewal

The permittee is granted a renewal of general mercury variance under the provisions of Rule 3745-33-07(D)(8) of the Ohio Administrative Code. The permittee has demonstrated that the facility is currently unable to comply with the monthly average water quality based effluent limit of 1.3 ng/l without construction of expensive end-of-pipe controls more stringent than those required by sections 301(b) and 306 of the Clean Water Act. The permittee is currently able to achieve or projects it can achieve an annual average mercury concentration of 12 ng/l. For general mercury variance purposes, the annual average mercury effluent concentration is defined as the average of the most recent 12 months of effluent data.

One of the conditions of the general mercury variance is that the permittee make reasonable progress towards attaining the water quality based effluent limits for mercury (1.b, below). To accomplish this the permittee is required to implement a pollutant minimization program (PMP) for mercury. The elements of a PMP include: a control strategy to locate, identify and, where cost-effective, reduce levels of mercury that contribute to discharge levels; periodic monitoring of sources and the treatment system; and annual reporting of results.

The plan of study that was part of the permittee's application for coverage under the general mercury variance includes items associated with developing a control strategy and initial implementation of a PMP. Condition 1.d, below, requires the permittee to implement the plan of study. By implementing the plan of study and meeting other conditions of this NPDES permit, the permittee is taking actions consistent with a PMP for mercury.

1. As conditions of this variance, the permittee shall meet the following requirements:
  - a. The permittee shall comply with the effluent limitations for mercury at outfall 3PF00001001 given in Part I, A of this permit.
  - b. The permittee shall make reasonable progress towards attaining the monthly average water quality based effluent limit for mercury by complying with the general mercury variance conditions included in this NPDES permit.
  - c. The permittee shall use EPA Method 1631 to comply with the influent and effluent mercury monitoring requirements of this permit.
  - d. The permittee shall continue to implement the plan of study as included in the mercury variance application submitted on June 20, 2011, and subsequent submittals after June 20, 2011.
  - e. The permittee shall assess the impact of the mercury variance on public health, safety, and welfare by, as a minimum, monitoring for mercury in the facility's influent and effluent as required by this NPDES permit.
  - f. The permittee shall achieve an annual average mercury effluent concentration equal to or less than 12 ng/l.
  - g. On or prior to May 15th of each year, the permittee shall submit two copies of an annual PMP report to Ohio EPA, Division of Surface Water, Pretreatment Unit, P.O. Box 1049, Columbus, OH, 43216-1049. The annual PMP report shall include:
    - i. All minimization program monitoring results for the year
    - ii. A list of potential sources of mercury
    - iii. A summary of all actions taken to meet the effluent limits for mercury
    - iv. Any updates of the control strategy, including actions planned to reduce the levels of mercury in the treatment plant's final effluent

h. Upon completion of the actions identified in the plan of study as required in Part II, Item U.1.d. of this permit or upon submittal of the permittee's NPDES permit renewal application, whichever comes first, the permittee shall submit to Ohio EPA's Northeast District Office a certification stating that all permit conditions imposed to implement the plan of study and the PMP have been satisfied and whether compliance with the monthly average water quality based effluent limit for mercury has been achieved and can be maintained. This certification shall be accompanied by the following:

- i. All available mercury influent and effluent data for the most recent 12 month period.
- ii. Data documenting all known significant sources of mercury and the steps that have been taken to reduce or eliminate those sources; and
- iii. A determination of the lowest mercury concentration that currently available data indicate can be reliably achieved through implementation of the PMP.

2. Exceedance of annual average limit of 12 ng/l.

a. If at any time after the date specified in this variance by which the permittee must meet an average annual mercury effluent concentration of 12 ng/l or after the Director's final approval of a variance renewal, whichever is earlier, the permittee's annual average mercury effluent concentration exceeds 12 ng/l, the permittee shall:

- i. Notify Ohio EPA's Northeast District Office not later than 30 days from the date of the exceedance.
- ii. Submit an individual variance application, if a variance is desired, not later than 6 months from the date of the exceedance; or
- iii. Request a permit modification not later than 6 months from the date of the exceedance for a compliance schedule to attain compliance with the water quality based effluent limits for mercury.

b. If the permittee complies with either 2.a.ii or 2.a.iii, above, the general mercury variance conditions included in this NPDES permit will remain in effect until the date that the Director acts on the individual variance application or the date that the permit modification becomes effective.

c. If the permittee does not comply with either 2.a.ii or 2.a.iii, above, a monthly water-quality based effluent limit for mercury of 1.3 ng/l shall apply at outfall 3PF00001001 beginning 6 months from the date of the exceedance.

3. The requirements of Part II, Item U.2 shall not apply if the permittee demonstrates to the satisfaction of the Director that the mercury concentration in the permittee's effluent exceeds 12 ng/l due primarily to the presence of mercury in the permittee's intake water.

#### V. Permit Reopener for Mercury Variance Revisions

Ohio EPA may reopen and modify this permit at any time based upon Ohio EPA water quality standard revisions to the mercury variance granted in Part II, Item U of this permit.

#### W. Renewal of Mercury Variance

For renewal of the mercury variance authorized in this permit, the permittee shall include the following information with the submittal of the subsequent NPDES permit renewal application:

1. the certification described under Part II, Item U.1.h., and all information required under Part II, Item U.1.h.i. through Part II, Item U.1.h.iii;
2. a status report on the progress being made implementing the pollutant minimization program (PMP). This information may be included in the annual PMP report required under Part II, Item U.1.g;
3. a listing of the strategies and/or programs in the PMP which will be continued under the next renewal of this permit; and
4. a statement requesting the renewal of the mercury variance.

## X. Biomonitoring Program Requirements

The permittee shall continue implementation of a biomonitoring program to determine the toxicity of the effluent from outfall 3PF00001001.

### General Requirements

All toxicity testing conducted as required by this permit shall be done in accordance with "Reporting and Testing Guidance for Biomonitoring Required by the Ohio Environmental Protection Agency" (hereinafter, the "biomonitoring guidance"), Ohio EPA, July 1998 (or current revision). The Standard Operating Procedures (SOP) or verification of SOP submittal, as described in Section 1.B. of the biomonitoring guidance shall be submitted no later than three months after the effective date of this permit. If the laboratory performing the testing has modified its protocols, a new SOP is required.

### Testing Requirements

#### 1. Chronic Bioassays

For the duration of this permit, the permittee shall conduct chronic toxicity tests twice per year using *Ceriodaphnia dubia* and once per year using fathead minnows (*Pimephales promelas*) on effluent samples from outfall 3PF00001001. These tests shall be conducted as specified in Section 3 of the biomonitoring guidance. Samples required for these tests may be collected utilizing either flow-proportionate or time-composite sampling equipment.

#### 2. Acute Bioassays

Acute endpoints, as described in Section 2.H. of the biomonitoring guidance, shall be derived from the chronic test.

#### 3. Data Review

##### a. Reporting

Following completion of each bioassay requirement, the permittee shall report results of the tests in accordance with Sections 3.H.1. and 3.H.2.a. of the biomonitoring guidance, including reporting the results on the monthly DMR and submitting a copy of the complete test report to Ohio EPA, Division of Surface Water, NPDES Permit Unit, P.O. Box 1049, Columbus, OH, 43216-1049.

Based on Ohio EPA's evaluation of the results, this permit may be modified to require additional biomonitoring, require a toxicity reduction evaluation, and/or contain whole effluent toxicity limits.

b. Definitions

TUa = Acute Toxic Units = 100/LC50

TUc = Chronic Toxic Units = 100/IC25

The above equation for chronic toxicity units applies outside the mixing zone for warmwater, modified warmwater, exceptional warmwater, coldwater, and seasonal salmonid use designations except when the following equation is more restrictive (Ceriodaphnia dubia only):

TUc = Chronic Toxic Units = 100/square root of (NOEC x LOEC)

Y. Pretreatment Program Requirements

The permittee's pretreatment program initially approved on September 6, 1985 and all subsequent modifications approved before the effective date of this permit, shall be an enforceable term and condition of this permit.

To ensure that the approved program is implemented in accordance with 40 CFR 403, Chapter 3745-3 of Ohio Administrative Code and Chapter 6111 of the Ohio Revised Code, the permittee shall comply with the following conditions:

1. Legal Authority

The permittee shall adopt and maintain legal authority which enables it to fully implement and enforce all aspects of its approved pretreatment program including the identification and characterization of industrial sources, issuance of control documents, compliance monitoring and reporting, and enforcement.

The permittee shall establish agreements with all contributing jurisdictions, as necessary, to enable the permittee to fulfill its requirements with respect to industrial users discharging to its system.

2. Funding

The permittee shall have sufficient resources and qualified personnel to fully implement all aspects of its approved pretreatment program.

3. Industrial User Inventory

The permittee shall identify all industrial users subject to pretreatment standards and requirements and characterize the nature and volume of pollutants in their wastewater. Dischargers determined to be Significant Industrial Users according to OAC 3745-3-01(FF) must be notified of applicable pretreatment standards and requirements within 30 days of making such a determination. This inventory shall be updated at a frequency to ensure proper identification and characterization of industrial users.

#### 4. Slug Load Control Plans for Significant Industrial Users

The permittee shall evaluate the need for a plan, device or structure to control a potential slug discharge at least once during the term of each significant industrial user's control mechanism. Existing significant industrial users shall be evaluated within one year of the effective date of this permit if the users have never been evaluated. New industrial users identified as significant industrial users shall be evaluated within one year of being identified as a significant industrial user.

#### 5. Local Limits

The permittee shall develop and enforce technically based local limits to prevent the introduction of pollutants into the POTW which will interfere with the operation of the POTW, pass through the treatment works, be incompatible with the treatment works, or limit wastewater or sludge use options.

The permittee shall use the following waste load allocation values when evaluating local limits for the following pollutants for which a final effluent limit has not been established:

Antimony	1800 ug/l
Arsenic	680 ug/l
Beryllium	154 ug/l
Cadmium	11 ug/l
Chromium, hexavalent	31 ug/l
Chromium, total	1089 ug/l
Copper	33 ug/l
Cyanide	44 ug/l
Lead	88 ug/l
Nickel	650 ug/l
Selenium	55 ug/l
Silver	4.3 ug/l
Thallium	160 ug/l
Zinc	280 ug/l

For the purpose of periodically reevaluating local limits, the permittee shall implement and maintain a sampling program to characterize pollutant contribution to the POTW from industrial and residential sources and to determine pollutant removal efficiencies through the POTW. The permittee shall continue to review and develop local limits as necessary.

#### 6. Control Mechanisms

The permittee shall issue control mechanisms to all industries determined to be Significant Industrial Users as define in OAC 3745-3-01(FF). Control mechanisms must meet at least the minimum requirements of OAC-3745-3-03(C)(1)(c).



## 7. Industrial Compliance Monitoring

The permittee shall sample and inspect industrial users in accordance with the approved program or approved modifications, including inspection and sampling of all significant industrial users at least annually. Sample collection, preservation and analysis must be performed in accordance with procedures in 40 CFR 136 and with sufficient care to produce evidence admissible in judicial enforcement proceedings.

The permittee shall also require, receive, and review self-monitoring and other industrial user reports when necessary to determine compliance with pretreatment standards and requirements. If the permittee performs sampling and analysis in lieu of an industrial user's self-monitoring, the permittee shall perform repeat sampling and analysis within 30 days of becoming aware of a permit violation, unless the permittee notifies the user of the violation and requires the user to perform the repeat analysis and reporting.

## 8. POTW Priority Pollutant Monitoring

The permittee shall annually monitor priority pollutants, as defined by U.S. EPA, in the POTW's influent, effluent and sludge. Sample collection, preservation, and analysis shall be performed using U.S. EPA approved methods.

a. A sample of the influent and the effluent shall be collected when industrial discharges are occurring at normal to maximum levels. Sampling of the influent shall be done prior to any recycle streams and sampling of the effluent shall be after disinfection. Both samples shall be collected on the same day or, alternately, the effluent sample may be collected following the influent sample by approximately the retention time of the POTW.

Sampling of sludge shall be representative of sludge removed to final disposal. A minimum of one grab sample shall be taken during actual sludge removal and disposal unless the POTW uses more than one disposal option. If multiple disposal options are used, the POTW shall collect a composite of grab samples from all disposal practices which are proportional to the annual flows to each type of disposal.

b. A reasonable attempt shall be made to identify and quantify additional constituents (excluding priority pollutants and unsubstituted aliphatic compounds) at each sample location. Identification of additional peaks more than ten times higher than the adjacent background noise on the total ion plots (reconstructed gas chromatograms) shall be attempted through the use of U.S. EPA/NIH computerized library of mass spectra, with visual confirmation by an experienced analyst. Quantification may be based on an order of magnitude estimate compared with an internal standard.

The results of these samples must be submitted on Ohio EPA Form 4221 with the permittee's annual pretreatment report. Samples may be collected at any time during the 12 months preceding the due date of the annual report and may be used to fulfill other NPDES monitoring requirements where applicable.

## 9. Enforcement

The permittee shall investigate all instances of noncompliance with pretreatment standards and requirements and take timely, appropriate, and effective enforcement action to resolve the noncompliance in accordance with the permittee's approved enforcement response plan.

On or prior to July 15th of each year, the permittee shall publish, in a newspaper of general circulation that provides meaningful public notice within the jurisdiction served by the permittee, a list of industrial users which, during the previous 12 months, have been in Significant Noncompliance [OAC 3745-3-03(C)(2)(h)] with applicable pretreatment standards or requirements.

## 10. Reporting

All reports required under this section shall be submitted either through Ohio EPA's eBusiness Center or by mail. The Ohio EPA eBusiness Center can be found in the link: <https://ebiz.epa.ohio.gov/login.html>.

If submitting hardcopies by mail, reports shall be sent to the following address in duplicate:

Ohio Environmental Protection Agency  
Division of Surface Water  
Pretreatment Unit  
P.O. Box 1049  
Columbus, OH 43216-1049

### a. Quarterly Industrial User Violation Report

On or prior to the 15th day of March, June, September, and December, the permittee shall report the industrial users that are in violation of applicable pretreatment standards during the previous quarter. The report shall be prepared in accordance with guidance provided by Ohio EPA and shall include a description of all industrial user violations and corrective actions taken to resolve the violations.

### b. Annual Pretreatment Report

On or prior to May 15th of each year, the permittee shall submit an annual report on the effectiveness of the pretreatment program. The report shall be prepared in accordance with guidance provided by Ohio EPA and shall include, but not be limited to: a discussion of program effectiveness; and industrial user inventory; a description of the permittee's monitoring program; a description of any pass through or interference incidents; a copy of the annual publication of industries in Significant Noncompliance; and, priority pollutant monitoring results.

## 11. Record Keeping

All records of pretreatment activities including, but not limited to, industrial inventory data, monitoring results, enforcement actions, and reports submitted by industrial users must be maintained for a minimum of three (3) years. This period of retention shall be extended during the course of any unresolved litigation. Records must be made available to Ohio EPA and U.S. EPA upon request.

## 12. Program Modifications

Any proposed modifications of the approved pretreatment program must be submitted to Ohio EPA for review, on forms available from Ohio EPA and consistent with guidance provided by Ohio EPA. If the modification is deemed to be substantial, prior approval must be obtained before implementation; otherwise, the modification is considered to be effective 45 days after the date of application. Substantial program modifications include, among other things, changes to the POTW's legal authority, industrial user control mechanisms, local limits, confidentiality procedures, or monitoring frequencies.

## Z. Community Discharge Program

1. Not later than December 1 of each calendar year, the permittee shall submit a report that summarizes the status of the community discharge programs. The report shall be submitted to the Ohio EPA, Northeast District Office, Division of Surface Water. The permittee is responsible for including in the report information as it is received from the satellite communities. The permittee is not responsible for the completeness or the veracity of the information it receives from each of the satellite communities.

#### AA. Wet Weather Flow

Ohio EPA has determined that portions of the permittee's collection system is comprised of combined sewers. Wet weather overflows from the combined sewer system are regulated under Permit No.3PA00002.

The permittee shall ensure that the entire wastewater treatment system is operated and maintained so that the total loading of pollutants discharged during wet weather is minimized. To accomplish this, the permittee shall comply with the nine minimum controls contained in the National Combined Sewer Overflow (CSO) Control Policy. The permittee's implementation of the nine minimum controls is described in the NEORS D Combined Sewer System Operational Plan, which was approved by the Director on January 25, 1999. The nine minimum controls are:

- 1) provide proper operation and maintenance for the collection system and the combined sewer overflow points;
- 2) provide the maximum use of the collection system for storage of wet weather flow prior to allowing overflows;
- 3) review and modify the pretreatment program to minimize the impact of nondomestic discharges from combined sewer overflows;
- 4) maximize the capabilities of the POTW to treat wet weather flows, and maximize the wet weather flow to the wastewater treatment plant within the limits of the plant's capabilities;
- 5) prohibit dry weather overflows;
- 6) control solid and floatable materials in the combined sewer overflow discharge;
- 7) conduct required inspection, monitoring and reporting of CSOs;
- 8) implement pollution prevention programs that focus on reducing the level of contaminants in CSOs; and
- 9) implement a public notification program for areas affected by CSOs, especially beaches and recreation areas.

BB. On July 7, 2011, Consent Decree 1:10CV2895-DCN was filed in the United States District Court for the Northern District of Ohio. The Consent Decree contains provisions and schedules for addressing wet weather flow conditions at the respective wastewater treatment systems operated by the permittee. This NPDES permit may be modified, or alternatively revoked and reissued, to incorporate provisions and conditions of the Consent Decree and any modifications or revisions thereof.

CC. The Easterly WWTP shall always be operated to maximize the treatment of wet weather flows from its combined sewer system. For each wet weather event, the treatment plant shall treat 400 MGD through the primary and secondary treatment processes during wet weather. This shall be accomplished by having a Wet Weather Operating Plan (WWOP) containing procedures and guidance for operating unit processes, including any CSO treatment/retention facilities. The goals of the WWOP are to provide operational guidance to plant staff for treating the wet-weather flow, while not appreciably diminishing effluent quality or destabilizing treatment upon return to dry weather operation. The permittee shall make reasonable effort to properly schedule equipment maintenance to avoid wet weather service interruptions. Reasonable effort shall include appropriate staffing levels for maintaining and repairing critical equipment that lacks redundancy as part of the operations component of the WWOP. This includes restoring all equipment to service as quickly as practicable to comply with maximizing flow to the treatment plant.

The permittee shall at all times comply with the concentration limitations contained in this permit. Mass loading limitations included in this permit at Outfall 3PF00001001 are based on the facility's normal operating capacity of 155 MGD. Exceedances of the mass loading limitations could occur if the volume of wet weather flow to the plant reaches a point that exceeds the normal operating capacity. During periods of excessive or extended wet weather flow treatment, the permittee is authorized to utilize Reporting Code 50047, Peak Flow Rate, in conjunction with Reporting Code 50050, Flow Rate; the permittee shall report a minimum of 155 MGD for Reporting Code 50050 and all excess flow to Reporting Code 50047. Flow values reported under Reporting Code 50047 are not utilized in subsequent loading calculations. Reporting Code 50047 may not be utilized when the use of Reporting Code 50050 would be reasonably expected to achieve the associated mass loading limitation.

DD. Monitoring for Dissolved Orthophosphate (as P)

The permittee shall monitor for dissolved orthophosphate by grab sample. The permittee shall filter the grab sample within 15 minutes of collection using a 0.45-micron filter. The filtered sample must be analyzed within 48 hours. Samples shall be collected at such times and locations, and in such fashion, as to be representative of the facility's overall performance.

## PART III - GENERAL CONDITIONS

### 1. DEFINITIONS

"Daily discharge" means the discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in units of mass, the "daily discharge" is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the "daily discharge" is calculated as the average measurement of the pollutant over the day.

"Average weekly" discharge limitation means the highest allowable average of "daily discharges" over a calendar week, calculated as the sum of all "daily discharges" measured during a calendar week divided by the number of "daily discharges" measured during that week. Each of the following 7-day periods is defined as a calendar week: Week 1 is Days 1 - 7 of the month; Week 2 is Days 8 - 14; Week 3 is Days 15 - 21; and Week 4 is Days 22 - 28. If the "daily discharge" on days 29, 30 or 31 exceeds the "average weekly" discharge limitation, Ohio EPA may elect to evaluate the last 7 days of the month as Week 4 instead of Days 22 - 28. Compliance with fecal coliform bacteria or E coli bacteria limitations shall be determined using the geometric mean.

"Average monthly" discharge limitation means the highest allowable average of "daily discharges" over a calendar month, calculated as the sum of all "daily discharges" measured during a calendar month divided by the number of "daily discharges" measured during that month. Compliance with fecal coliform bacteria or E coli bacteria limitations shall be determined using the geometric mean.

"85 percent removal" means the arithmetic mean of the values for effluent samples collected in a period of 30 consecutive days shall not exceed 15 percent of the arithmetic mean of the values for influent samples collected at approximately the same times during the same period.

"Absolute Limitations" Compliance with limitations having descriptions of "shall not be less than," "not greater than," "shall not exceed," "minimum," or "maximum" shall be determined from any single value for effluent samples and/or measurements collected.

"Net concentration" shall mean the difference between the concentration of a given substance in a sample taken of the discharge and the concentration of the same substances in a sample taken at the intake which supplies water to the given process. For the purpose of this definition, samples that are taken to determine the net concentration shall always be 24-hour composite samples made up of at least six increments taken at regular intervals throughout the plant day.

"Net Load" shall mean the difference between the load of a given substance as calculated from a sample taken of the discharge and the load of the same substance in a sample taken at the intake which supplies water to given process. For purposes of this definition, samples that are taken to determine the net loading shall always be 24-hour composite samples made up of at least six increments taken at regular intervals throughout the plant day.

"MGD" means million gallons per day.

"mg/l" means milligrams per liter.

"ug/l" means micrograms per liter.

"ng/l" means nanograms per liter.

"S.U." means standard pH unit.

"kg/day" means kilograms per day.

"Reporting Code" is a five digit number used by the Ohio EPA in processing reported data. The reporting code does not imply the type of analysis used nor the sampling techniques employed.

"Quarterly (1/Quarter) sampling frequency" means the sampling shall be done in the months of March, June, August, and December, unless specifically identified otherwise in the Effluent Limitations and Monitoring Requirements table.

"Yearly (1/Year) sampling frequency" means the sampling shall be done in the month of September, unless specifically identified otherwise in the effluent limitations and monitoring requirements table.

"Semi-annual (2/Year) sampling frequency" means the sampling shall be done during the months of June and December, unless specifically identified otherwise.

"Winter" shall be considered to be the period from November 1 through April 30.

"Bypass" means the intentional diversion of waste streams from any portion of the treatment facility.

"Summer" shall be considered to be the period from May 1 through October 31.

"Severe property damage" means substantial physical damage to property, damage to the treatment facilities which would cause them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

"Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

"Sewage sludge" means a solid, semi-solid, or liquid residue generated during the treatment of domestic sewage in a treatment works as defined in section 6111.01 of the Revised Code. "Sewage sludge" includes, but is not limited to, scum or solids removed in primary, secondary, or advanced wastewater treatment processes. "Sewage sludge" does not include ash generated during the firing of sewage sludge in a sewage sludge incinerator, grit and screenings generated during preliminary treatment of domestic sewage in a treatment works, animal manure, residue generated during treatment of animal manure, or domestic septage.

"Sewage sludge weight" means the weight of sewage sludge, in dry U.S. tons, including admixtures such as liming materials or bulking agents. Monitoring frequencies for sewage sludge parameters are based on the reported sludge weight generated in a calendar year (use the most recent calendar year data when the NPDES permit is up for renewal).

"Sewage sludge fee weight" means the weight of sewage sludge, in dry U.S. tons, excluding admixtures such as liming materials or bulking agents. Annual sewage sludge fees, as per section 3745.11(Y) of the Ohio Revised Code, are based on the reported sludge fee weight for the most recent calendar year.

## 2. GENERAL EFFLUENT LIMITATIONS

The effluent shall, at all times, be free of substances:

- A. In amounts that will settle to form putrescent, or otherwise objectionable, sludge deposits; or that will adversely affect aquatic life or water fowl;
- B. Of an oily, greasy, or surface-active nature, and of other floating debris, in amounts that will form noticeable accumulations of scum, foam or sheen;
- C. In amounts that will alter the natural color or odor of the receiving water to such degree as to create a nuisance;
- D. In amounts that either singly or in combination with other substances are toxic to human, animal, or aquatic life;
- E. In amounts that are conducive to the growth of aquatic weeds or algae to the extent that such growths become inimical to more desirable forms of aquatic life, or create conditions that are unsightly, or constitute a nuisance in any other fashion;
- F. In amounts that will impair designated instream or downstream water uses.

## 3. FACILITY OPERATION AND QUALITY CONTROL

All wastewater treatment works shall be operated in a manner consistent with the following:

- A. At all times, the permittee shall maintain in good working order and operate as efficiently as possible all treatment or control facilities or systems installed or used by the permittee necessary to achieve compliance with the terms and conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with conditions of the permit.
- B. The permittee shall effectively monitor the operation and efficiency of treatment and control facilities and the quantity and quality of the treated discharge.
- C. Maintenance of wastewater treatment works that results in degradation of effluent quality shall be scheduled during non-critical water quality periods and shall be carried out in a manner approved by Ohio EPA as specified in the Paragraph in the PART III entitled, "UNAUTHORIZED DISCHARGES".



#### 4. REPORTING

A. Monitoring data required by this permit shall be submitted monthly on Ohio EPA 4500 Discharge Monitoring Report (DMR) forms using the electronic DMR (e-DMR) internet application. e-DMR allows permitted facilities to enter, sign, and submit DMRs on the internet. e-DMR information is found on the following web page:

<http://www.epa.ohio.gov/dsw/edmr/eDMR.aspx>

Alternatively, if you are unable to use e-DMR due to a demonstrated hardship, monitoring data may be submitted on paper DMR forms provided by Ohio EPA. Monitoring data shall be typed on the forms. Please contact Ohio EPA, Division of Surface Water at (614) 644-2050 if you wish to receive paper DMR forms.

B. DMRs shall be signed by a facility's Responsible Official or a Delegated Responsible Official (i.e. a person delegated by the Responsible Official). The Responsible Official of a facility is defined as:

1. For corporations - a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision making functions for the corporation; or the manager of one or more manufacturing, production or operating facilities, provided the manager is authorized to make management decisions which govern the operation of the regulated facility including having explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long-term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;
2. For partnerships - a general partner;
3. For a sole proprietorship - the proprietor; or,
4. For a municipality, state or other public facility - a principal executive officer, a ranking elected official or other duly authorized employee.

For e-DMR, the person signing and submitting the DMR will need to obtain an eBusiness Center account and Personal Identification Number (PIN). Additionally, Delegated Responsible Officials must be delegated by the Responsible Official, either on-line using the eBusiness Center's delegation function, or on a paper delegation form provided by Ohio EPA. For more information on the PIN and delegation processes, please view the following web page:

<http://epa.ohio.gov/dsw/edmr/eDMR.aspx>

C. DMRs submitted using e-DMR shall be submitted to Ohio EPA by the 20th day of the month following the month-of-interest. DMRs submitted on paper must include the original signed DMR form and shall be mailed to Ohio EPA at the following address so that they are received no later than the 15th day of the month following the month-of-interest:

Ohio Environmental Protection Agency  
Lazarus Government Center  
Division of Surface Water - PCU  
P.O. Box 1049  
Columbus, Ohio 43216-1049

D. If the permittee monitors any pollutant at the location(s) designated herein more frequently than required by this permit, using approved analytical methods as specified in Section 5. SAMPLING AND ANALYTICAL METHODS, the results of such monitoring shall be included in the calculation and reporting of the values required in the reports specified above.

E. Analyses of pollutants not required by this permit, except as noted in the preceding paragraph, shall not be reported to the Ohio EPA, but records shall be retained as specified in Section 7. RECORDS RETENTION.

#### 5. SAMPLING AND ANALYTICAL METHOD

Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored flow. Test procedures for the analysis of pollutants shall conform to regulation 40 CFR 136, "Test Procedures For The Analysis of Pollutants" unless other test procedures have been specified in this permit. The permittee shall periodically calibrate and perform maintenance procedures on all monitoring and analytical instrumentation at intervals to insure accuracy of measurements.

#### 6. RECORDING OF RESULTS

For each measurement or sample taken pursuant to the requirements of this permit, the permittee shall record the following information:

- A. The exact place and date of sampling; (time of sampling not required on EPA 4500)
- B. The person(s) who performed the sampling or measurements;
- C. The date the analyses were performed on those samples;
- D. The person(s) who performed the analyses;
- E. The analytical techniques or methods used; and
- F. The results of all analyses and measurements.

#### 7. RECORDS RETENTION

The permittee shall retain all of the following records for the wastewater treatment works for a minimum of three years except those records that pertain to sewage sludge disposal, use, storage, or treatment, which shall be kept for a minimum of five years, including:

- A. All sampling and analytical records (including internal sampling data not reported);
- B. All original recordings for any continuous monitoring instrumentation;
- C. All instrumentation, calibration and maintenance records;
- D. All plant operation and maintenance records;
- E. All reports required by this permit; and
- F. Records of all data used to complete the application for this permit for a period of at least three years, or five years for sewage sludge, from the date of the sample, measurement, report, or application.

These periods will be extended during the course of any unresolved litigation, or when requested by the Regional Administrator or the Ohio EPA. The three year period, or five year period for sewage sludge, for retention of records shall start from the date of sample, measurement, report, or application.

## 8. AVAILABILITY OF REPORTS

Except for data determined by the Ohio EPA to be entitled to confidential status, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the appropriate district offices of the Ohio EPA. Both the Clean Water Act and Section 6111.05 Ohio Revised Code state that effluent data and receiving water quality data shall not be considered confidential.

## 9. DUTY TO PROVIDE INFORMATION

The permittee shall furnish to the Director, within a reasonable time, any information which the Director may request to determine whether cause exists for modifying, revoking, and reissuing, or terminating the permit, or to determine compliance with this permit. The permittee shall also furnish to the Director, upon request, copies of records required to be kept by this permit.

## 10. RIGHT OF ENTRY

The permittee shall allow the Director or an authorized representative upon presentation of credentials and other documents as may be required by law to:

- A. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit.
- B. Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit.
- C. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit.
- D. Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act, any substances or parameters at any location.

## 11. UNAUTHORIZED DISCHARGES

A. Bypass Not Exceeding Limitations - The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of paragraphs 11.B and 11.C.

### B. Notice

1. Anticipated Bypass - If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible at least ten days before the date of the bypass.

2. Unanticipated Bypass - The permittee shall submit notice of an unanticipated bypass as required in paragraph 12.B (24 hour notice).

### C. Prohibition of Bypass

1. Bypass is prohibited, and the Director may take enforcement action against a permittee for bypass, unless:

- a. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
- b. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and
- c. The permittee submitted notices as required under paragraph 11.B.

2. The Director may approve an anticipated bypass, after considering its adverse effects, if the Director determines that it will meet the three conditions listed above in paragraph 11.C.1.

## 12. NONCOMPLIANCE NOTIFICATION

### A. Exceedance of a Daily Maximum Discharge Limit

1. The permittee shall report noncompliance that is the result of any violation of a daily maximum discharge limit for any of the pollutants listed by the Director in the permit by e-mail or telephone within twenty-four (24) hours of discovery.

The permittee may report to the appropriate Ohio EPA district office e-mail account as follows (this method is preferred):

Southeast District Office: sedo24hournpdes@epa.state.oh.us  
Southwest District Office: swdo24hournpdes@epa.state.oh.us  
Northwest District Office: nwdo24hournpdes@epa.state.oh.us  
Northeast District Office: nedo24hournpdes@epa.state.oh.us  
Central District Office: cdo24hournpdes@epa.state.oh.us  
Central Office: co24hournpdes@epa.state.oh.us

The permittee shall attach a noncompliance report to the e-mail. A noncompliance report form is available on the following web site under the Monitoring and Reporting - Non-Compliance Notification section:

<http://epa.ohio.gov/dsw/permits/individuals.aspx>

Or, the permittee may report to the appropriate Ohio EPA district office by telephone toll-free between 8:00 AM and 5:00 PM as follows:

Southeast District Office: (800) 686-7330  
Southwest District Office: (800) 686-8930  
Northwest District Office: (800) 686-6930  
Northeast District Office: (800) 686-6330  
Central District Office: (800) 686-2330  
Central Office: (614) 644-2001

The permittee shall include the following information in the telephone noncompliance report:

- a. The name of the permittee, and a contact name and telephone number;
- b. The limit(s) that has been exceeded;
- c. The extent of the exceedance(s);
- d. The cause of the exceedance(s);
- e. The period of the exceedance(s) including exact dates and times;
- f. If uncorrected, the anticipated time the exceedance(s) is expected to continue; and,
- g. Steps taken to reduce, eliminate or prevent occurrence of the exceedance(s).

#### B. Other Permit Violations

1. The permittee shall report noncompliance that is the result of any unanticipated bypass resulting in an exceedance of any effluent limit in the permit or any upset resulting in an exceedance of any effluent limit in the permit by e-mail or telephone within twenty-four (24) hours of discovery.

The permittee may report to the appropriate Ohio EPA district office e-mail account as follows (this method is preferred):

Southeast District Office: sedo24hournpdes@epa.state.oh.us  
Southwest District Office: swdo24hournpdes@epa.state.oh.us  
Northwest District Office: nwdo24hournpdes@epa.state.oh.us  
Northeast District Office: nedo24hournpdes@epa.state.oh.us  
Central District Office: cdo24hournpdes@epa.state.oh.us  
Central Office: co24hournpdes@epa.state.oh.us

The permittee shall attach a noncompliance report to the e-mail. A noncompliance report form is available on the following web site:

<http://www.epa.ohio.gov/dsw/permits/permits.aspx>

Or, the permittee may report to the appropriate Ohio EPA district office by telephone toll-free between 8:00 AM and 5:00 PM as follows:

Southeast District Office: (800) 686-7330  
Southwest District Office: (800) 686-8930  
Northwest District Office: (800) 686-6930  
Northeast District Office: (800) 686-6330  
Central District Office: (800) 686-2330  
Central Office: (614) 644-2001

The permittee shall include the following information in the telephone noncompliance report:

- a. The name of the permittee, and a contact name and telephone number;
- b. The time(s) at which the discharge occurred, and was discovered;
- c. The approximate amount and the characteristics of the discharge;
- d. The stream(s) affected by the discharge;
- e. The circumstances which created the discharge;
- f. The name and telephone number of the person(s) who have knowledge of these circumstances;
- g. What remedial steps are being taken; and,
- h. The name and telephone number of the person(s) responsible for such remedial steps.

2. The permittee shall report noncompliance that is the result of any spill or discharge which may endanger human health or the environment within thirty (30) minutes of discovery by calling the 24-Hour Emergency Hotline toll-free at (800) 282-9378. The permittee shall also report the spill or discharge by e-mail or telephone within twenty-four (24) hours of discovery in accordance with B.1 above.

C. When the telephone option is used for the noncompliance reports required by A and B, the permittee shall submit to the appropriate Ohio EPA district office a confirmation letter and a completed noncompliance report within five (5) days of the discovery of the noncompliance. This follow up report is not necessary for the e-mail option which already includes a completed noncompliance report.

D. If the permittee is unable to meet any date for achieving an event, as specified in a schedule of compliance in their permit, the permittee shall submit a written report to the appropriate Ohio EPA district office within fourteen (14) days of becoming aware of such a situation. The report shall include the following:

1. The compliance event which has been or will be violated;
2. The cause of the violation;
3. The remedial action being taken;
4. The probable date by which compliance will occur; and,
5. The probability of complying with subsequent and final events as scheduled.

E. The permittee shall report all other instances of permit noncompliance not reported under paragraphs A or B of this section on their monthly DMR submission. The DMR shall contain comments that include the information listed in paragraphs A or B as appropriate.

F. If the permittee becomes aware that it failed to submit an application, or submitted incorrect information in an application or in any report to the director, it shall promptly submit such facts or information.

#### 13. RESERVED

#### 14. DUTY TO MITIGATE

The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

## 15. AUTHORIZED DISCHARGES

All discharges authorized herein shall be consistent with the terms and conditions of this permit. The discharge of any pollutant identified in this permit more frequently than, or at a level in excess of, that authorized by this permit shall constitute a violation of the terms and conditions of this permit. Such violations may result in the imposition of civil and/or criminal penalties as provided for in Section 309 of the Act and Ohio Revised Code Sections 6111.09 and 6111.99.

## 16. DISCHARGE CHANGES

The following changes must be reported to the appropriate Ohio EPA district office as soon as practicable:

A. For all treatment works, any significant change in character of the discharge which the permittee knows or has reason to believe has occurred or will occur which would constitute cause for modification or revocation and reissuance. The permittee shall give advance notice to the Director of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements. Notification of permit changes or anticipated noncompliance does not stay any permit condition.

B. For publicly owned treatment works:

1. Any proposed plant modification, addition, and/or expansion that will change the capacity or efficiency of the plant;

2. The addition of any new significant industrial discharge; and

3. Changes in the quantity or quality of the wastes from existing tributary industrial discharges which will result in significant new or increased discharges of pollutants.

C. For non-publicly owned treatment works, any proposed facility expansions, production increases, or process modifications, which will result in new, different, or increased discharges of pollutants.

Following this notice, modifications to the permit may be made to reflect any necessary changes in permit conditions, including any necessary effluent limitations for any pollutants not identified and limited herein. A determination will also be made as to whether a National Environmental Policy Act (NEPA) review will be required. Sections 6111.44 and 6111.45, Ohio Revised Code, require that plans for treatment works or improvements to such works be approved by the Director of the Ohio EPA prior to initiation of construction.

D. In addition to the reporting requirements under 40 CFR 122.41(l) and per 40 CFR 122.42(a), all existing manufacturing, commercial, mining, and silvicultural dischargers must notify the Director as soon as they know or have reason to believe:

1. That any activity has occurred or will occur which would result in the discharge on a routine or frequent basis of any toxic pollutant which is not limited in the permit. If that discharge will exceed the highest of the "notification levels" specified in 40 CFR Sections 122.42(a)(1)(i) through 122.42(a)(1)(iv).

2. That any activity has occurred or will occur which would result in any discharge, on a non-routine or infrequent basis, of a toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the "notification levels" specified in 122.42(a)(2)(i) through 122.42(a)(2)(iv).

## 17. TOXIC POLLUTANTS

The permittee shall comply with effluent standards or prohibitions established under Section 307 (a) of the Clean Water Act for toxic pollutants within the time provided in the regulations that establish these standards or prohibitions, even if the permit has not yet been modified to incorporate the requirement. Following establishment of such standards or prohibitions, the Director shall modify this permit and so notify the permittee.

## 18. PERMIT MODIFICATION OR REVOCATION

A. After notice and opportunity for a hearing, this permit may be modified or revoked, by the Ohio EPA, in whole or in part during its term for cause including, but not limited to, the following:

1. Violation of any terms or conditions of this permit;
2. Obtaining this permit by misrepresentation or failure to disclose fully all relevant facts; or
3. Change in any condition that requires either a temporary or permanent reduction or elimination of the permitted discharge.

B. Pursuant to rule 3745-33-04, Ohio Administrative Code, the permittee may at any time apply to the Ohio EPA for modification of any part of this permit. The filing of a request by the permittee for a permit modification or revocation does not stay any permit condition. The application for modification should be received by the appropriate Ohio EPA district office at least ninety days before the date on which it is desired that the modification become effective. The application shall be made only on forms approved by the Ohio EPA.

## 19. TRANSFER OF OWNERSHIP OR CONTROL

This permit may be transferred or assigned and a new owner or successor can be authorized to discharge from this facility, provided the following requirements are met:

A. The permittee shall notify the succeeding owner or successor of the existence of this permit by a letter, a copy of which shall be forwarded to the appropriate Ohio EPA district office. The copy of that letter will serve as the permittee's notice to the Director of the proposed transfer. The copy of that letter shall be received by the appropriate Ohio EPA district office sixty (60) days prior to the proposed date of transfer;

B. A written agreement containing a specific date for transfer of permit responsibility and coverage between the current and new permittee (including acknowledgement that the existing permittee is liable for violations up to that date, and that the new permittee is liable for violations from that date on) shall be submitted to the appropriate Ohio EPA district office within sixty days after receipt by the district office of the copy of the letter from the permittee to the succeeding owner;

At anytime during the sixty (60) day period between notification of the proposed transfer and the effective date of the transfer, the Director may prevent the transfer if he concludes that such transfer will jeopardize compliance with the terms and conditions of the permit. If the Director does not prevent transfer, he will modify the permit to reflect the new owner.

## 20. OIL AND HAZARDOUS SUBSTANCE LIABILITY

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under Section 311 of the Clean Water Act.

## 21. SOLIDS DISPOSAL

Collected grit and screenings, and other solids other than sewage sludge, shall be disposed of in such a manner as to prevent entry of those wastes into waters of the state, and in accordance with all applicable laws and rules.

## 22. CONSTRUCTION AFFECTING NAVIGABLE WATERS

This permit does not authorize or approve the construction of any onshore or offshore physical structures or facilities or the undertaking of any work in any navigable waters.



### 23. CIVIL AND CRIMINAL LIABILITY

Except as exempted in the permit conditions on UNAUTHORIZED DISCHARGES or UPSETS, nothing in this permit shall be construed to relieve the permittee from civil or criminal penalties for noncompliance.

### 24. STATE LAWS AND REGULATIONS

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable state law or regulation under authority preserved by Section 510 of the Clean Water Act.

### 25. PROPERTY RIGHTS

The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of federal, state, or local laws or regulations.

### 26. UPSET

The provisions of 40 CFR Section 122.41(n), relating to "Upset," are specifically incorporated herein by reference in their entirety. For definition of "upset," see Part III, Paragraph 1, DEFINITIONS.

### 27. SEVERABILITY

The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

### 28. SIGNATORY REQUIREMENTS

All applications submitted to the Director shall be signed and certified in accordance with the requirements of 40 CFR 122.22.

All reports submitted to the Director shall be signed and certified in accordance with the requirements of 40 CFR Section 122.22.

### 29. OTHER INFORMATION

A. Where the permittee becomes aware that it failed to submit any relevant facts in a permit application or submitted incorrect information in a permit application or in any report to the Director, it shall promptly submit such facts or information.

B. ORC 6111.99 provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than \$25,000 per violation.

C. ORC 6111.99 states that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit including monitoring reports or reports of compliance or noncompliance shall, upon conviction, be punished by a fine of not more than \$25,000 per violation.

D. ORC 6111.99 provides that any person who violates Sections 6111.04, 6111.042, 6111.05, or division (A) of Section 6111.07 of the Revised Code shall be fined not more than \$25,000 or imprisoned not more than one year, or both.

30. NEED TO HALT OR REDUCE ACTIVITY

40 CFR 122.41(c) states that it shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with conditions of this permit.

31. APPLICABLE FEDERAL RULES

All references to 40 CFR in this permit mean the version of 40 CFR which is effective as of the effective date of this permit.

32. AVAILABILITY OF PUBLIC SEWERS

Notwithstanding the issuance or non-issuance of an NPDES permit to a semi-public disposal system, whenever the sewage system of a publicly owned treatment works becomes available and accessible, the permittee operating any semi-public disposal system shall abandon the semi-public disposal system and connect it into the publicly owned treatment works.

## **Part IV. Storm Water Control Measures and Pollution Prevention Programs**

In Part IV and in Part VI, the term “minimize” means reduce and/or eliminate to the extent achievable using control measures (including best management practices) that are technologically available and economically practicable and achievable in light of best industry practice.

### **A. Control Measures.**

You shall select, design, install, and implement control measures (including best management practices) to address the selection and design considerations in Part IV.B, and meet the control measures/best management practices in Part IV.C. The selection, design, installation, and implementation of these control measures shall be in accordance with good engineering practices and manufacturer’s specifications. Note that you may deviate from such manufacturer’s specifications where you provide justification for such deviation and include documentation of your rationale in the part of your SWPPP that describes your control measures, consistent with Part IV.J.3. If you find that your control measures are not achieving their intended effect of minimizing pollutant discharges, you shall modify these control measures as expeditiously as practicable. Regulated storm water discharges from your facility include storm water run-on that commingles with storm water discharges associated with industrial activity at your facility.

### **B. Control Measure Selection and Design Considerations.**

You shall consider the following when selecting and designing control measures:

1. Preventing storm water from coming into contact with polluting materials is generally more effective, and less costly, than trying to remove pollutants from storm water;
2. Using control measures in combination is more effective than using control measures in isolation for minimizing pollutants in your storm water discharge;
3. Assessing the type and quantity of pollutants, including their potential to impact receiving water quality, is critical to designing effective control measures that will achieve the limits in this permit;
4. Minimizing impervious areas at your facility and infiltrating runoff onsite (including bioretention cells, green roofs, and pervious pavement, among other approaches) can reduce runoff and improve groundwater recharge and stream base flows in local streams, although care shall be taken to avoid ground water contamination;
5. Attenuating flow using open vegetated swales and natural depressions can reduce in-stream impacts of erosive flows;
6. Conserving and/or restoring of riparian buffers will help protect streams from storm water runoff and improve water quality; and

7. Using treatment interceptors (e.g., swirl separators and sand filters) may be appropriate in some instances to minimize the discharge of pollutants.

**C. Control Measures/Best Management Practices (BMPs)**

1. Minimize Exposure. You shall minimize the exposure of manufacturing, processing, and material storage areas (including loading and unloading, storage, disposal, cleaning, maintenance, and fueling operations) to rain, snow, snowmelt, and runoff by either locating these industrial materials and activities inside or protecting them with storm resistant coverings (although significant enlargement of impervious surface area is not recommended). In minimizing exposure, you should pay particular attention to the following:
  - a. Use grading, berming, or curbing to prevent runoff of contaminated flows and divert run-on away from these areas;
  - b. Locate materials, equipment, and activities so that leaks are contained in existing containment and diversion systems (confine the storage of leaky or leak-prone vehicles and equipment awaiting maintenance to protected areas);
  - c. Clean up spills and leaks promptly using dry methods (e.g., absorbents) to prevent the discharge of pollutants;
  - d. Use drip pans and absorbents under or around leaky vehicles and equipment or store indoors where feasible;
  - e. Use spill/overflow protection equipment;
  - f. Drain fluids from equipment and vehicles prior to on-site storage or disposal;
  - g. Perform all cleaning operations indoors, under cover, or in bermed areas that prevent runoff and run-on and also that capture any overspray; and
  - h. Ensure that all washwater drains to a proper collection system (i.e., not the storm water drainage system).

The discharge of vehicle and equipment washwater, including tank cleaning operations, is not authorized by this permit.

2. Good Housekeeping. You shall keep clean all exposed areas that are potential sources of pollutants, using such measures as sweeping at regular intervals, keeping materials orderly and labeled, and storing materials in appropriate containers.
3. Maintenance. You shall regularly inspect, test, maintain, and repair all industrial equipment and systems to avoid situations that may result in leaks, spills, and other releases of pollutants in storm water discharged to receiving waters. You shall maintain all control measures that are used

to achieve the control measures/best management practices (BMPs) required by this permit in effective operating condition. Nonstructural control measures shall also be diligently maintained (e.g., spill response supplies available, personnel appropriately trained). If you find that your control measures need to be replaced or repaired, you shall make the necessary repairs or modifications as expeditiously as practicable.

4. Spill Prevention and Response Procedures. You shall minimize the potential for leaks, spills and other releases that may be exposed to storm water and develop plans for effective response to such spills if or when they occur. At a minimum, you shall implement:
  - a. Procedures for plainly labeling containers (e.g., “Used Oil,” “Spent Solvents,” “Fertilizers and Pesticides,” etc.) that could be susceptible to spillage or leakage to encourage proper handling and facilitate rapid response if spills or leaks occur;
  - b. Preventative measures such as barriers between material storage and traffic areas, secondary containment provisions, and procedures for material storage and handling;
  - c. Procedures for expeditiously stopping, containing, and cleaning up leaks, spills, and other releases. Employees who may cause, detect, or respond to a spill or leak shall be trained in these procedures and have necessary spill response equipment available. If possible, one of these individuals should be a member of your storm water pollution prevention team (Part IV.J.1); and
  - d. Where a leak, spill or other release containing a hazardous substance or oil in an amount equal to or in excess of a reportable quantity established under either 40 CFR Part 110, 40 CFR Part 117, or 40 CFR Part 302, occurs during a 24-hour period, you shall notify the Ohio EPA in accordance with the requirements of Part III Item 12 of this permit.
5. Erosion and Sediment Controls. You shall stabilize exposed areas and contain runoff using structural and/or non-structural control measures to minimize onsite erosion and sedimentation, and the resulting discharge of pollutants. Among other actions you shall take to meet this limit, you shall place flow velocity dissipation devices at discharge locations and within outfall channels where necessary to reduce erosion and/or settle out pollutants. In selecting, designing, installing, and implementing appropriate control measures, you are encouraged to consult with the Ohio Department of Natural Resources (ODNR) Division of Soil and Water Conservation’s Rainwater and Land Development manual ([http://epa.ohio.gov/dsw/storm/technical\\_guidance.aspx](http://epa.ohio.gov/dsw/storm/technical_guidance.aspx)), U.S. EPA’s internet-based resources relating to BMPs for erosion and sedimentation, including the sector-specific *Industrial Storm Water Fact Sheet Series*, ([www.epa.gov/npdes/stormwater/msgp](http://www.epa.gov/npdes/stormwater/msgp)), *National Menu of Storm Water BMPs* ([www.epa.gov/npdes/stormwater/menuofbmps](http://www.epa.gov/npdes/stormwater/menuofbmps)), and *National Management Measures to Control Nonpoint Source Pollution from Urban Areas* ([www.epa.gov/owow/nps/urbanmm/index.html](http://www.epa.gov/owow/nps/urbanmm/index.html)).

6. Management of Runoff. You shall divert, infiltrate, reuse, contain, or otherwise reduce storm water runoff, to minimize pollutants in your discharges. In selecting, designing, installing, and implementing appropriate control measures, you are encouraged to consult with the Ohio Department of Natural Resources (ODNR) Division of Soil and Water Conservation's Rainwater and Land Development manual ([http://epa.ohio.gov/dsw/storm/technical\\_guidance.aspx](http://epa.ohio.gov/dsw/storm/technical_guidance.aspx)), U.S. EPA's internet-based resources relating to runoff management, including the sector-specific *Industrial Storm Water Fact Sheet Series*, ([www.epa.gov/npdes/stormwater/msgp](http://www.epa.gov/npdes/stormwater/msgp)), *National Menu of Storm Water BMPs* ([www.epa.gov/npdes/stormwater/menuofbmps](http://www.epa.gov/npdes/stormwater/menuofbmps)), and *National Management Measures to Control Nonpoint Source Pollution from Urban Areas* ([www.epa.gov/owow/nps/urbanmm/index.html](http://www.epa.gov/owow/nps/urbanmm/index.html)).
7. Salt Storage Piles or Piles Containing Salt. You shall enclose or cover storage piles of salt, or piles containing salt, used for deicing or other commercial or industrial purposes, including maintenance of paved surfaces. You shall implement appropriate measures (e.g., good housekeeping, diversions, containment) to minimize exposure resulting from adding to or removing materials from the pile.
8. Employee Training. You shall train all employees who work in areas where industrial materials or activities are exposed to storm water, or who are responsible for implementing activities necessary to meet the conditions of this permit (e.g., inspectors, maintenance personnel), including all members of your Pollution Prevention Team. Training shall cover both the specific control measures used to achieve the conditions in this Part, and monitoring, inspection, planning, reporting, and documentation requirements in other parts of this permit. Ohio EPA requires that training be conducted at least annually (or more often if employee turnover is high).
9. Non-Storm Water Discharges. You shall eliminate non-storm water discharges not authorized by an NPDES permit including sanitary and industrial wastewater and equipment and vehicle washwater that are not authorized by Part I of this permit. The following are the non-storm water discharges authorized under this permit:
  - a. Discharges from fire-fighting activities (not planned exercises);
  - b. Fire hydrant flushings;
  - c. Potable water, including water line flushings;
  - d. Uncontaminated condensate from air conditioners, coolers/chillers, and other compressors and from the outside storage of refrigerated gases or liquids;
  - e. Irrigation drainage;
  - f. Landscape watering provided all pesticides, herbicides, and fertilizer have been applied in accordance with the approved labeling;

- g. Pavement wash waters where no detergents or hazardous cleaning products are used (e.g., bleach, hydrofluoric acid, muriatic acid, sodium hydroxide, nonylphenols, etc.), and the wash waters do not come into contact with oil and grease deposits, sources of pollutants associated with industrial activities (see Part IV.J.2), or any other toxic or hazardous materials, unless residues are first cleaned up using dry clean-up methods (e.g., applying absorbent materials and sweeping, using hydrophobic mops/rags) and you have implemented appropriate control measures to minimize discharges of mobilized solids and other pollutants (e.g., filtration, detention, settlement);
  - h. Routine external building washdown/power wash water that does not use detergents or hazardous cleaning products (e.g., those containing bleach, hydrofluoric acid, muriatic acid, sodium hydroxide, nonylphenols, etc.);
  - i. Uncontaminated ground water or spring water;
  - j. Foundation or footing drains where flows are not contaminated with process materials; and
  - k. Incidental windblown mist from cooling towers that collect on rooftops or adjacent portions of your facility, but not intentional discharges from the cooling tower (e.g., “piped” cooling tower blowdowns or drains).
10. Waste, Garbage and Floatable Debris. You shall ensure that waste, garbage, and floatable debris are not discharged to receiving waters by keeping exposed areas free of such materials or by intercepting them before they are discharged.
11. Dust Generation and Vehicle Tracking of Industrial Materials. You shall minimize generation of dust and off-site tracking of raw, final, or waste materials.

#### **D. Corrective Actions**

1. Conditions Requiring Review and Revision to Eliminate Problem. If any of the following conditions occur, you shall review and revise the selection, design, installation, and implementation of your control measures to ensure that the condition is eliminated and will not be repeated in the future:
- a. An unauthorized release or discharge (e.g., spill, leak, or discharge of non-storm water not authorized by this or another NPDES permit) occurs at your facility;
  - b. A discharge violates a numeric effluent limit;
  - c. You become aware, or Ohio EPA determines, that your control measures are not stringent enough for the discharge to meet applicable water quality standards;

- d. An inspection or evaluation of your facility by an Ohio EPA official or local MS4 operator determines that modifications to the control measures are necessary to meet the control measures/best management practices (BMPs) in this permit; or
  - e. You find in your routine facility inspection or quarterly visual assessment that your control measures are not being properly operated and maintained.
2. Conditions Requiring Review to Determine if Modifications Are Necessary. If any of the following conditions occur, you shall review the selection, design, installation, and implementation of your control measures to determine if modifications are necessary to meet the Part IV.A conditions in this permit:
- a. Construction or a change in design, operation, or maintenance at your facility significantly changes the nature of pollutants discharged in storm water from your facility, or significantly increases the quantity of pollutants discharged.
3. Corrective Action Deadlines. You shall document your discovery of any of the conditions listed in Part IV.D.1 and Part IV.D.2 within 24 hours of making such discovery. Subsequently, within 30 days of such discovery, you shall document any corrective action(s) to be taken to eliminate or further investigate the deficiency, or if no corrective action is needed, the basis for that determination. Specific documentation required within 24 hours and 30 days is detailed in Part IV.D.4. If you determine that changes are necessary following your review, any modifications to your control measures shall be made before the next storm event if possible, or as soon as practicable following that storm event. These time intervals are not grace periods, but are schedules considered reasonable for documenting your findings and for making repairs and improvements. They are included in this permit to ensure that the conditions prompting the need for these repairs and improvements are not allowed to persist indefinitely.
4. Corrective Action Report. Within 24 hours of discovery of any condition listed in Part IV.D.1 and Part IV.D.2, you shall document the following information (i.e., question 4 of the Corrective Actions section in the Annual Reporting Form, available at [http://www.epa.state.oh.us/portals/35/permits/IndustrialStormWater\\_Final\\_GP\\_AppI\\_dec11.pdf](http://www.epa.state.oh.us/portals/35/permits/IndustrialStormWater_Final_GP_AppI_dec11.pdf)):
- Identification of the condition triggering the need for corrective action review;
  - Description of the problem identified; and
  - Date the problem was identified.

Within 30 days of discovery of any condition listed in Part IV.D.1 and Part IV.D.2, you shall document the following information (i.e., questions 7-11 of the Corrective Actions section in the Annual Reporting Form):



- Summary of corrective action taken or to be taken (or, for triggering events identified in Part IV.D.2 where you determine that corrective action is not necessary, the basis for this determination);
- Notice of whether SWPPP modifications are required as a result of this discovery or corrective action;
- Date corrective action initiated; and
- Date corrective action completed or expected to be completed.

You shall include this documentation in an annual report as required in Part V.A.1 and retain onsite with your SWPPP.

5. Effect of Corrective Action. If the event triggering the review is a permit violation (e.g., non-compliance with an effluent limit), correcting it does not remove the original violation. Additionally, failing to take corrective action in accordance with this section is an additional permit violation. Ohio EPA will consider the appropriateness and promptness of corrective action in determining enforcement responses to permit violations.
6. Substantially Identical Outfalls. If the event triggering corrective action is linked to an outfall that represents other substantially identical outfalls, your review shall assess the need for corrective action for each outfall represented by the outfall that triggered the review. Any necessary changes to control measures that affect these other outfalls shall also be made before the next storm event if possible, or as soon as practicable following that storm event.

## **E. Inspections**

Beginning on the effective date of this permit, you shall conduct the inspections in Part IV.E.1 and Part IV.E.2 at your facility. Include the following areas in all inspections: access roads and rail lines; grit, screenings, and other solids handling, storage, or disposal areas; sludge drying beds; dried sludge piles; compost piles; and septage or hauled waste receiving station.

1. Routine Facility Inspections.
  - a. Conduct routine facility inspections of all areas of the facility where industrial materials or activities are exposed to storm water, and of all storm water control measures used to comply with Part IV. Items A-C conditions contained in this permit. Routine facility inspections shall be conducted at least quarterly (i.e., once each calendar quarter) although in many instances, more frequent inspection (e.g., monthly) may be appropriate for some types of equipment, processes, and control measures or areas of the facility with significant activities and materials exposed to storm water. Perform these inspections during periods when the facility is in operation. You shall specify the relevant inspection schedules in your SWPPP document as required in Part IV. Items A-C. These routine inspections shall be performed by

qualified personnel (for definition see VI - Definitions) with at least one member of your storm water pollution prevention team participating. At least once each calendar year, the routine facility inspection shall be conducted during a period when a storm water discharge is occurring.

You shall document the findings of each routine facility inspection performed and maintain this documentation onsite with your SWPPP. You are not required to submit your routine facility inspection findings to Ohio EPA, unless specifically requested to do so. At a minimum, your documentation of each routine facility inspection shall include:

- i. The inspection date and time;
- ii. The name(s) and signature(s) of the inspector(s);
- iii. Weather information and a description of any discharges occurring at the time of the inspection;
- iv. Any previously unidentified discharges of pollutants from the site;
- v. Any control measures needing maintenance or repairs;
- vi. Any failed control measures that need replacement;
- vii. Any incidents of noncompliance observed; and
- viii. Any additional control measures needed to comply with the permit requirements.

Any corrective action required as a result of a routine facility inspection shall be performed consistent with Part IV.D of this permit.

b. Exceptions to Routine Facility Inspections:

Inactive and Unstaffed Sites: The requirement to conduct routine facility inspections on a quarterly basis does not apply at a facility that is inactive and unstaffed, as long as there are no industrial materials or activities exposed to storm water. Such a facility is only required to conduct an annual site inspection in accordance with the requirements of Part IV.E.1. To invoke this exception, you shall maintain a statement in your SWPPP pursuant to Part IV.F indicating that the site is inactive and unstaffed, and that there are no industrial materials or activities exposed to precipitation, in accordance with the substantive requirements in 40 CFR 122.26(g)(4)(iii). The statement shall be signed and certified in accordance with Appendix B, Subsection 11. If circumstances change and industrial materials or activities become exposed to storm water or your facility becomes active and/or staffed, this exception no longer applies and you shall immediately resume quarterly facility inspections. If you are not qualified for this exception at the time you are authorized under this permit, but during the permit term you

become qualified because your facility is inactive and unstaffed, and there are no industrial materials or activities that are exposed to storm water, then you shall include the same signed and certified statement as above and retain it with your records pursuant to Part IV.J.5.

Ohio EPA's Encouraging Environmental Excellence (E3) Program: If your facility has been recognized under the Gold and Platinum levels by Ohio EPA's Encouraging Environmental Excellence (E3) Program, you only need to conduct routine facility inspections for two quarters each year.

## 2. Quarterly Visual Assessment of Storm Water Discharges.

### a. Quarterly Visual Assessment Procedures

Once each calendar quarter for the entire permit term, you shall collect a storm water sample from each outfall (except as noted in Part IV.E.2.c) that requires sampling under this permit and conduct a visual assessment of each of these samples. These samples are not required to be collected consistent with 40 CFR Part 136 procedures but should be collected in such a manner that the samples are representative of the storm water discharge. The visual assessment shall be made:

- Of a sample in a clean, clear glass, or plastic container, and examined in a well-lit area;
- On samples collected within the first 30 minutes of an actual discharge from a storm event. If it is not possible to collect the sample within the first 30 minutes of discharge, the sample shall be collected as soon as practicable after the first 30 minutes and you shall document why it was not possible to take samples within the first 30 minutes. In the case of snowmelt, samples shall be taken during a period with a measurable discharge from your site; and
- For storm events, on discharges that occur at least 72 hours (3 days) from the previous discharge. The 72-hour (3-day) storm interval does not apply if you document that less than a 72-hour (3-day) interval is representative for local storm events during the sampling period. If it is not possible to collect the sample on discharges that occur at least 72 hours (3 days) from the previous discharge, the sample shall be collected as close to this storm interval as practicable and you shall document why it was not possible to take samples from a 72 hour (3 day) storm interval.
- Areas Subject to Snow: In areas subject to snow, at least one quarterly visual assessment shall capture snowmelt discharge.
- For the following water quality characteristics: color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of storm water pollution.

b. Quarterly Visual Assessment Documentation

You shall document the results of your visual assessments and maintain this documentation onsite with your SWPPP. You are not required to submit your visual assessment findings to Ohio EPA, unless specifically requested to do so. At a minimum, your documentation of the visual assessment shall include:

- Sample location(s);
- Sample collection date and time, and visual assessment date and time for each sample;
- Personnel collecting the sample and performing visual assessment, and their signatures;
- Nature of the discharge (i.e., runoff or snowmelt);
- Results of observations of the storm water discharge;
- Probable sources of any observed storm water contamination; and
- If applicable, why it was not possible to take samples within the first 30 minutes and/or from a 72 hour (3 day) storm interval.

Any corrective action required as a result of a quarterly visual assessment shall be performed consistent with Part IV.D of this permit.

c. Exceptions to Quarterly Visual Assessments:

The following are exceptions to quarterly visual assessments:

- Adverse Weather Conditions: When adverse weather conditions prevent the collection of samples during the quarter, you shall take a substitute sample during the next qualifying storm event. Documentation of the rationale for no visual assessment for the quarter shall be included with your SWPPP records. Adverse conditions are those that are dangerous or create inaccessibility for personnel, such as local flooding, high winds, or electrical storms, or situations that otherwise make sampling impractical, such as drought or extended frozen conditions.
- Inactive and unstaffed sites: The requirement for a quarterly visual assessment does not apply at a facility that is inactive and unstaffed, as long as there are no industrial materials or activities exposed to storm water. To invoke this exception, you shall maintain a statement in your SWPPP indicating that the site is inactive and unstaffed, and that there are no industrial materials or activities exposed to precipitation, in accordance with the substantive requirements in 40 CFR 122.26(g)(4)(iii). The statement shall be signed and certified in accordance with Part III.28 of this permit. If circumstances

change and industrial materials or activities become exposed to storm water or your facility becomes active and/or staffed, this exception no longer applies and you shall immediately resume quarterly visual assessments. If you are not qualified for this exception at the time you are authorized under this permit, but during the permit term you become qualified because your facility is inactive and unstaffed, and there are no industrial materials or activities that are exposed to storm water, then you shall include the same signed and certified statement as above and retain it with your records.

- Ohio EPA's Encouraging Environmental Excellence (E3) Program: If your facility has been recognized under the Gold and Platinum levels by Ohio EPA's Encouraging Environmental Excellence (E3) Program, you only need to conduct quarterly visual assessment of storm water discharges for two quarters each year.

#### **F. Storm Water Pollution Prevention Plan (SWPPP)**

A storm water pollution prevention plan (SWPPP) shall be developed to address each outfall that discharges to waters of the state that contains storm water associated with industrial activity. Storm water pollution prevention plans shall be prepared in accordance with good engineering practices. The SWPPP shall identify potential sources of pollution which may reasonably be expected to affect the quality of storm water discharges associated with industrial activity from the facility. The SWPPP shall describe and ensure the implementation of practices which are to be used to reduce the pollutants in storm water discharges associated with industrial activity at the facility and to assure compliance with the terms and conditions of this permit. Facilities must implement the provisions of the storm water pollution prevention plan required under this part as a condition of this permit.

The SWPPP does not contain effluent limitations; the limitations are contained in Part I of this permit. The SWPPP is intended to document the selection, design, and installation of control measures. As distinct from the SWPPP, the documentation requirements are intended to document the implementation (including inspection, maintenance, monitoring, and corrective action) of the permit requirements.

#### **G. Deadlines for SWPPP Preparation and Compliance.**

1. The plan for a storm water discharge associated with industrial activity:
  - a. Shall be prepared within six months of the effective date of this permit (and updated based on facility or materials handling changes as specified in Part IV, Item I);
  - b. Shall provide for implementation and compliance with the terms of the plan within twelve months of the effective date of this permit.
2. Upon showing of good cause, the Director may establish a later date for preparing and compliance with a plan for a storm water discharge associated with industrial activity.

**H. Signature and Plan Review.**

1. The plan shall be signed and dated in accordance with Part III, Item 28, and be retained on-site at the facility which generates the storm water discharge.
2. The permittee shall make plans immediately available upon request to the Ohio EPA Director, or authorized representative, or Regional Administrator of U.S. EPA, a local agency approving storm water management plans, or in the case of a storm water discharge associated with industrial activity which discharges through a municipal separate storm sewer system, to the operator of the municipal system.

The Director may notify the permittee at any time that the plan does not meet one or more of the minimum requirements of this Part. Within 30 days of such notification from the Director, the permittee shall make the required changes to the plan and shall submit to the Director a written certification that the requested changes have been made.

3. All storm water pollution prevention plans required under this permit are considered reports that shall be available to the public under Section 308(b) of the Act. Confidential Business Information (CBI) may be withheld from the public, but may not be withheld from those staff cleared for CBI review within Ohio EPA. An interested party wishing a copy of a discharger's SWPPP will have to contact the Ohio EPA to obtain a copy.

**I. Keeping SWPPP Current**

The permittee shall modify the plan whenever necessary to address any of the triggering conditions for corrective action in Part IV.D and to ensure that they do not reoccur, or to reflect changes implemented when a review following the triggering conditions in Part IV.D.2 indicates that changes to your control measures are necessary to meet the control measures/best management practices (BMPs) in this permit. Changes to your SWPPP document shall be made in accordance with the corrective action deadlines in Part IV.D.3 and Part IV.D.4.

Amendments to the plan may be reviewed by Ohio EPA in the same manner as Part IV.H above.

**J. Contents of SWPPP.**

The plan shall include, at a minimum, the following items:

1. Pollution Prevention Team. You shall identify the staff members (by name or title) that comprise the facility's storm water pollution prevention team as well as their individual responsibilities. Your storm water pollution prevention team is responsible for assisting the facility manager in developing and revising the facility's SWPPP as well as maintaining control measures and taking corrective actions where required. Each member of the storm water pollution prevention team shall have ready access to either an electronic or paper copy of applicable portions of this permit and your SWPPP.

2. Description of Potential Pollutant Sources. You shall document at your facility where industrial materials or activities are exposed to storm water and from which allowable non-storm water discharges are released. Industrial materials or activities, include, but are not limited to: material handling equipment or activities; industrial machinery; raw materials; industrial production and processes; and intermediate products, by-products, final product or waste product. For each area identified, the description shall include, at a minimum:
  - a. Site Description. Your SWPPP shall include:
    - i. A description of the industrial activities at your facility;
    - ii. A general location map (e.g. U.S. Geologic Survey (USGS) quadrangle map) with enough detail to identify the location of your facility and all receiving waters for your storm water discharges.
    - iii. A site map showing
      - The size of the property in acres;
      - The location and extent of significant structures and impervious surfaces;
      - Directions of storm water flow (use arrows);
      - Locations of all existing structural control measures;
      - Locations of all receiving waters in the immediate vicinity of your facility;
      - Locations of all storm water conveyances including ditches, pipes and swales;
      - Locations of potential pollutant sources identified under Part IV J. 2.b;
      - Locations where significant spills or leaks identified under Part IV J. 2.b. have occurred;
      - Locations of all storm water monitoring points;
      - Locations of storm water inlets and outfalls, with a unique identification code for each outfall (e.g. Outfall 001, Outfall 002, etc), indicating any outfalls that are considered substantially identical to another outfall, and an approximate outline of the areas draining to each outfall;
      - Municipal separate storm sewer systems, where your storm water discharges to them;

- Locations and descriptions of all non-storm water discharges identified under Part IV. C. 10;
  - Locations of the following activities where such activities are exposed to precipitation
    - Fueling stations;
    - Vehicle and equipment maintenance and/or cleaning areas;
    - Loading/unloading areas;
    - Immediate access roads and rail lines used or traveled by carriers of raw materials, manufactured products, waste material, or by-products used or created by the facility;
    - Transfer areas for substances in bulk;
    - Machinery; and
  - Locations and sources of run-on to your site from adjacent property that contains significant quantities of pollutants.
  - Locations of any of the following which may be exposed to precipitation or surface runoff: grit, screenings, and other solids handling, storage, or disposal areas; sludge drying beds; dried sludge piles; compost piles; septage or hauled waste receiving station; and storage areas for process chemicals, petroleum products, solvents, fertilizers, herbicides, and pesticides.
- b. Inventory of Exposed Materials. This includes a list of industrial activities exposed to storm water (e.g., material storage; equipment fueling, maintenance, and cleaning; cutting steel beams). This also includes a list of the pollutant(s) or pollutant constituents (e.g. crankcase oil, zinc, sulfuric acid, and cleaning solvents) associated with each identified activity. The pollutant list shall include all significant materials that have been handled, treated, stored, or disposed, and that have been exposed to storm water in the three years prior to the data you prepare or amend your SWPPP.
- c. Spills and Leaks. You shall document where potential spills and leaks could occur that could contribute pollutants to storm water discharges, and the corresponding outfall(s) that would be affected by such spills and leaks. You shall document all significant spills and leaks of oil or toxic or hazardous pollutants that actually occurred at exposed areas, or that drained to a storm water conveyance, in the three years prior to the date you prepare or amend your SWPPP. Note that significant spills and leaks include, but are not limited to, releases of oil or hazardous substances in excess of quantities that are reportable under CWA Section 311



(see 40 CFR 110.6 and 40 CFR 117.21) or Section 102 of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), 42 USC Section 9602. This permit does not relieve you of the reporting requirements of 40 CFR 110, 40 CFR 117, and 40 CFR 302 relating to spills or other releases of oil or hazardous substances.

- d. **Sampling Data.** A summary of existing discharge sampling data describing pollutants in storm water discharges from the facility.
  - e. **Non-Storm Water Discharges.** You shall document that you have evaluated for the presence of non-storm water discharges, except for those listed in Part I and Part IV.C.9, and that all unauthorized discharges have been eliminated. Documentation of your evaluation shall include: 1) The date of any evaluation; 2) A description of the evaluation criteria used; 3) A list of the outfalls or onsite drainage points that were directly observed during the evaluation; 4) The different types of non-storm water discharge(s) and source locations; and 5) The action(s) taken, such as a list of control measures used to eliminate unauthorized discharge(s), if any were identified. For example, a floor drain was sealed, a sink drain was re-routed to sanitary, or an NPDES permit application was submitted for an unauthorized cooling water discharge. Keep a copy of all your current NPDES permits issued for wastewater and industrial, vehicle and equipment washwater discharges or, if an NPDES permit has not yet been issued, a copy of the pending application(s) with your SWPPP. If the washwater is handled in another manner, the disposal method shall be described and all pertinent documentation shall be retained onsite.
  - f. **Salt Storage.** You shall document the location of any storage piles containing salt used for deicing or other commercial or industrial purposes.
3. **Description of Control Measures.** You shall document the location and type of control measures you have installed and implemented at your site to achieve the control measures/best management practices (BMPs) in Part IV.C. You shall describe how you addressed the control measure selection and design considerations in Part IV.B. This documentation shall describe how the control measures at your site address both the pollutant sources identified in Part IV.J.2 and any storm water run-on that commingles with any discharges covered under this permit. In addition to the other control measures, consider the following: routing contaminated storm water to the treatment works; or covering exposed materials (i.e., from the following areas: grit, screenings, and other solids handling, storage, or disposal areas; sludge drying beds; dried sludge piles; compost piles; and septage or hauled waste receiving station).
4. **Schedules and Procedures.**
- a. **Pertaining to Control Measures used to Comply with the Control Measures/Best Management Practices (BMPs).** The following shall be documented in your SWPPP:

- i. Good Housekeeping (See Part IV.C.2) – A schedule for regular pickup and disposal of waste materials, along with routine inspections for leaks and conditions of drums, tanks and containers.
  - ii. Maintenance (See Part IV.C.3) – Preventative maintenance procedures, including regular inspections, testing, maintenance, and repair of all industrial equipment and systems, and control measures, to avoid situations that may result in leaks, spills, and other releases, and any back-up practices in place should a runoff event occur while a control measure is off-line;
  - iii. Spill Prevention and Response Procedures (See Part IV.C.4) – Procedures for preventing and responding to spills and leaks. You may reference the existence of other plans for Spill Prevention Control and Countermeasure (SPCC) developed for the facility under Section 311 of the CWA or BMP programs otherwise required by an NPDES permit for the facility, provided that you keep a copy of that other plan onsite (hard copy or electronic) and make it available for review consistent with Part IV.J.5; and
  - iv. Employee Training (See Part IV.C.8) – A schedule for all types of necessary training. At a minimum, training shall address the following areas when applicable to a facility: petroleum product management; process chemical management; spill prevention and controls; fueling procedures; general good housekeeping practices; and proper procedures for using fertilizer, herbicides, and pesticides.
- b. Pertaining to Monitoring and Inspection. Where applicable, you shall document in your SWPPP your procedures for conducting analytical storm water monitoring. You shall document in your SWPPP your procedures for performing, as appropriate, the two types of inspections specified by this permit, including: 1) Routine facility inspections (See Part IV.E.1) and 2) Quarterly visual assessment of storm water discharges (See Part IV.E.2).
5. Documentation Requirements.

You are required to keep inspection, monitoring, and certification records with your SWPPP that together keep your records complete and up-to-date, and demonstrate your full compliance with the conditions of this permit. You shall retain a copy of the current SWPPP required by this permit at the facility, and it shall be immediately available to Ohio EPA; a local agency approving storm water management plans; and the operator of an MS4 receiving discharges from the site. Ohio EPA may provide access to portions of your SWPPP to a member of the public upon request. Confidential Business Information (CBI) may be withheld from the public, but may not be withheld from those staff cleared for CBI review within Ohio EPA. Your current SWPPP or certain information from your current SWPPP shall be made available to the public, except any confidential business information (CBI) or restricted information, but you must clearly identify those portions of the SWPPP that are being withheld from public access. See 40 CFR

Part 2 for relevant definitions of CBI: <http://www.gpo.gov/fdsys/pkg/CFR-2013-title40-vol1/pdf/CFR-2013-title40-vol1-part2-subpartB.pdf>.

## **K. Sector-Specific Requirements**

### **Subpart T – Sector T – Treatment Works.**

*Reserved.*

## Part V. Monitoring and Reporting Requirements

### A. Reporting and Recordkeeping

1. Annual Report. You shall complete an annual report using the Annual Reporting Form provided by Ohio EPA at the following location:

[http://epa.ohio.gov/Portals/35/permits/OHR000006\\_Final%20Permit.pdf](http://epa.ohio.gov/Portals/35/permits/OHR000006_Final%20Permit.pdf) [Pages 141-142]

You are not required to submit your annual report to Ohio EPA unless specifically requested. The timeframe to complete the report is at the discretion of the permittee but the same schedule to complete shall be maintained throughout this permit term. You shall keep the completed annual reports with your SWPPP.

## Part VI. Definitions and Acronyms

**Action Area** – all areas to be affected directly or indirectly by the storm water discharges, allowable non-storm water discharges, and storm water discharge-related activities, and not merely the immediate area involved in these discharges and activities.

**Best Management Practices (BMPs)** – schedules of activities, practices (and prohibitions of practices), structures, vegetation, maintenance procedures, and other management practices to prevent or reduce the discharge of pollutants to surface waters of the State. BMPs also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage. See 40 CFR 122.2.

**Co-located Industrial Activities** – Any industrial activities, excluding your primary industrial activity(ies), located on-site that are defined by the storm water regulations at 122.26(b)(14)(i)-(ix) and (xi). An activity at a facility is not considered co-located if the activity, when considered separately, does not meet the description of a category of industrial activity covered by the storm water regulations or identified by the SIC code list in Appendix D.

**Control Measure** – refers to any BMP or other method (including effluent limitations) used to prevent or reduce the discharge of pollutants to surface waters of the State.

**Director** – the Director of the Ohio Environmental Protection Agency (Ohio EPA).

**Discharge** – when used without qualification, means the "discharge of a pollutant." See 40 CFR 122.2.

**Discharge of a pollutant** – any addition of any “pollutant” or combination of pollutants to “surface waters of the State” from any “point source,” or any addition of any pollutant or combination of pollutants to the waters of the “contiguous zone” or the ocean from any point source other than a vessel or other floating craft which is being used as a means of transportation. This includes additions of pollutants into surface waters of the State from: surface runoff which is collected or channeled by man; discharges through pipes, sewers, or other conveyances, leading into privately owned treatment works. See 40 CFR 122.2.

**Discharge-related activities** – activities that cause, contribute to, or result in storm water and allowable non-storm water point source discharges, and measures such as the siting, construction and operation of BMPs to control, reduce, or prevent pollution in the discharges.

**Drought-stricken area** – a period of below average water content in streams, reservoirs, ground-water aquifers, lakes and soils.

**U.S. EPA Approved or Established Total Maximum Daily Loads (TMDLs)** – “U.S. EPA Approved TMDLs” are those that are developed by a State and approved by U.S. EPA. “U.S. EPA Established TMDLs” are those that are developed by U.S. EPA.

**Existing Discharger** – an operator applying for coverage under this permit for discharges authorized previously under an NPDES general or individual permit.

**Facility or Activity** – any NPDES “point source” (including land or appurtenances thereto) that is subject to regulation under the NPDES program. See 40 CFR 122.2.

**Federal Facility** – any buildings, installations, structures, land, public works, equipment, aircraft, vessels, and other vehicles and property, owned by, or constructed or manufactured for the purpose of leasing to, the federal government.

**Illicit Discharge** – is defined at 40 CFR 122.26(b)(2) and refers to any discharge to a municipal separate storm sewer that is not entirely composed of storm water, except discharges authorized under an NPDES permit (other than the NPDES permit for discharges from the MS4) and discharges resulting from fire fighting activities.

**Impaired Water** (or “Water Quality Impaired Water” or “Water Quality Limited Segment”) – A water is impaired for purposes of this permit if it has been identified by a State or U.S. EPA pursuant to Section 303(d) of the Clean Water Act as not meeting applicable State water quality standards (these waters are called “water quality limited segments” under 40 CFR 30.2(j)). Impaired waters include both waters with approved or established TMDLs, and those for which a TMDL has not yet been approved or established.

**Industrial Activity** – the 10 categories of industrial activities included in the definition of “storm water discharges associated with industrial activity” as defined in 40 CFR 122.26(b)(14)(i)-(ix) and (xi).

**Industrial Storm Water** – storm water runoff from industrial activity.

**Municipal Separate Storm Sewer** – a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains):

- (i) Owned or operated by a State, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, storm water, or other wastes, including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or a designated and approved management agency under section 208 of the CWA that discharges to surface waters of the State;

- (ii) Designed or used for collecting or conveying storm water;
- (iii) Which is not a combined sewer; and
- (iv) Which is not part of a Publicly Owned Treatment Works (POTW) as defined at 40 CFR 122.2. See 40 CFR 122.26(b)(4) and (b)(7).

**New Discharger** – a facility from which there is a discharge, that did not commence the discharge at a particular site prior to August 13, 1979, which is not a new source, and which has never received a finally effective NPDES permit for discharges at that site. See 40 CFR 122.2.

**New Source** – any building, structure, facility, or installation from which there is or may be a “discharge of pollutants,” the construction of which commenced:

- after promulgation of standards of performance under section 306 of the CWA which are applicable to such source, or
- after proposal of standards of performance in accordance with section 306 of the CWA which are applicable to such source, but only if the standards are promulgated in accordance with section 306 within 120 days of their proposal. See 40 CFR 122.2.

**New Source Performance Standards (NSPS)** – technology-based standards for facilities that qualify as new sources under 40 CFR 122.2 and 40 CFR 122.29.

**No exposure** – all industrial materials or activities are protected by a storm-resistant shelter to prevent exposure to rain, snow, snowmelt, and/or runoff. See 40 CFR 122.26(g).

**Ohio EPA** – the Ohio Environmental Protection Agency.

**Operator** – any entity with a storm water discharge associated with industrial activity that meets either of the following two criteria:

- (i) The entity has operational control over industrial activities, including the ability to modify those activities; or
- (ii) The entity has day-to-day operational control of activities at a facility necessary to ensure compliance with the permit (e.g., the entity is authorized to direct workers at a facility to carry out activities required by the permit).

**Person** – an individual, association, partnership, corporation, municipality, State or Federal agency, or an agent or employee thereof. See 40 CFR 122.2.

**Point source** – any discernible, confined, and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel, or other floating craft from which pollutants are or may be discharged. This term does not include return flows from irrigated agriculture or agricultural storm water runoff. See 40 CFR 122.2.

**Pollutant** – dredged spoil, solid waste, incinerator residue, filter backwash, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt, and industrial, municipal and agricultural waste discharged into water. See 40 CFR 122.2.

**Pollutant of concern** – A pollutant which causes or contributes to a violation of a water quality standard, including a pollutant which is identified as causing an impairment in a state's 303(d) list.

**Primary industrial activity** – includes any activities performed on-site which are (1) identified by the facility's primary SIC code; or (2) included in the narrative descriptions of 122.26(b)(14)(i), (iv), (v), or (vii), and (ix). [For co-located activities covered by multiple SIC codes, it is recommended that the primary industrial determination be based on the value of receipts or revenues or, if such information is not available for a particular facility, the number of employees or production rate for each process may be compared. The operation that generates the most revenue or employs the most personnel is the operation in which the facility is primarily engaged. In situations where the vast majority of on-site activity falls within one SIC code, that activity may be the primary industrial activity.] Narrative descriptions in 40 CFR 122.26(b)(14) identified above include: (i) activities subject to storm water effluent limitations guidelines, new source performance standards, or toxic pollutant effluent standards; (iv) hazardous waste treatment storage, or disposal facilities including those that are operating under interim status or a permit under subtitle C of the Resource Conservation and Recovery Act (RCRA); (v) landfills, land application sites and open dumps that receive or have received industrial wastes; (vii) steam electric power generating facilities; and (ix) sewage treatment works with a design flow of 1.0 mgd or more.

**Qualified Personnel** – Qualified personnel are those who possess the knowledge and skills to assess conditions and activities that could impact storm water quality at your facility, and who can also evaluate the effectiveness of control measures.

**Reportable Quantity Release** – a release of a hazardous substance at or above the established legal threshold that requires emergency notification. Refer to 40 CFR Parts 110, 117, and 302 for complete definitions and reportable quantities for which notification is required.

**Runoff coefficient** – the fraction of total rainfall that will appear at the conveyance as runoff. See 40 CFR 122.26(b)(11).

**Semi-Arid Climate** – areas where annual rainfall averages from 10 to 20 inches.

**Significant materials** – includes, but is not limited to: raw materials; fuels; materials such as solvents, detergents, and plastic pellets; finished materials such as metallic products; raw materials used in food processing or production; hazardous substances designated under section 101(14) of CERCLA; any chemical the facility is required to report pursuant to section 313 of Title III of SARA; fertilizers; pesticides; and waste products such as ashes, slag and sludge that have the potential to be released with storm water discharges. See 40 CFR 122.26(b)(12).

**Special Aquatic Sites** – sites identified in 40 CFR 230 Subpart E. These are geographic areas, large or small, possessing special ecological characteristics of productivity, habitat, wildlife protection, or other important and easily disrupted ecological values. These areas are generally recognized as significantly influencing or positively contributing to the general overall environmental health or vitality of the entire ecosystem of a region.

**Storm Water** – storm water runoff, snow melt runoff, and surface runoff and drainage. See 40 CFR 122.26(b)(13).

**Storm Water Discharges Associated with Construction Activity** – a discharge of pollutants in storm water runoff from areas where soil disturbing activities (e.g., clearing, grading, or excavating), construction materials, or equipment storage or maintenance (e.g., fill piles, borrow areas, concrete truck washout, fueling), or other industrial storm water directly related to the construction process (e.g., concrete or asphalt batch plants) are located. See 40 CFR 122.26(b)(14)(x) and 40 CFR 122.26(b)(15).

**Storm Water Discharges Associated with Industrial Activity** – the discharge from any conveyance that is used for collecting and conveying storm water and that is directly related to manufacturing, processing or raw materials storage areas at an industrial plant. The term does not include discharges from facilities or activities excluded from the NPDES program under Part 122. For the categories of industries identified in this section, the term includes, but is not limited to, storm water discharges from industrial plant yards; immediate access roads and rail lines used or traveled by carriers of raw materials, manufactured products, waste material, or by-products used or created by the facility; material handling sites; refuse sites; sites used for the application or disposal of process waste waters (as defined at part 401 of this chapter); sites used for the storage and maintenance of material handling equipment; sites used for residual treatment, storage, or disposal; shipping and receiving areas; manufacturing buildings; storage areas (including tank farms) for raw materials, and intermediate and final products; and areas where industrial activity has taken place in the past and significant materials remain and are exposed to storm water. For the purposes of this paragraph, material handling activities include storage, loading and unloading, transportation, or conveyance of any raw material, intermediate product, final product, by-product or waste product. The term excludes areas located on plant lands separate from the plant's industrial activities, such as office buildings and accompanying parking lots as long as the drainage from the excluded areas is not mixed with storm water drained from the above described areas. Industrial facilities include those that are federally, State, or municipally owned or operated that meet the description of the facilities listed in 40 CFR 122.26(b)(14).

**Surface Waters of the State** - Means all streams, lakes, ponds, marshes, watercourses, waterways, springs, irrigation systems, drainage systems, and all other bodies or accumulations of surface water, natural or artificial, which are situated wholly or partly within, or border upon, this state, or are within its jurisdiction, except those private waters which do not combine or effect a junction with natural surface waters.

**Total Maximum Daily Loads (TMDLs)** – A TMDL is a calculation of the maximum amount of a pollutant that a waterbody can receive and still meet water quality standards, and an allocation of that amount to the pollutant's sources. A TMDL includes wasteload allocations (WLAs) for point source discharges; load allocations (LAs) for nonpoint sources and/or natural background, and shall include a margin of safety (MOS) and account for seasonal variations. (See section 303(d) of the Clean Water Act and 40 CFR 130.2 and 130.7).

**Water Quality Impaired** – See 'Impaired Water'.

**Water Quality Standards** – A water quality standard defines the water quality goals of a water body, or portion thereof, by designating the use or uses to be made of the water and by setting criteria necessary to protect the uses. States and U.S. EPA adopt water quality standards to protect public health or welfare,



enhance the quality of water and serve the purposes of the Clean Water Act (See CWA sections 101(a)2 and 303(c)). Water quality standards also include an antidegradation policy. See P.U.D. o. 1 of Jefferson County et al v. Wash Dept of Ecology et al, 511 US 701, 705 (1994).

**“You” and “Your”** – as used in this permit are intended to refer to the permittee, the operator, or the discharger as the context indicates and that party’s facility or responsibilities. The use of “you” and “your” refers to a particular facility and not to all facilities operated by a particular entity. For example, “you shall submit” means the permittee shall submit something for that particular facility. Likewise, “all your discharges” would refer only to discharges at that one facility.

## **ABBREVIATIONS AND ACRONYMS**

BAT – Best Available Technology Economically Achievable

BOD5 – Biochemical Oxygen Demand (5-day test)

BMP – Best Management Practice

BPJ – Best Professional Judgment

BPT – Best Practicable Control Technology Currently Available

CERCLA – Comprehensive Environmental Response, Compensation and Liability Act

CGP – Construction General Permit

COD – Chemical Oxygen Demand

CWA – Clean Water Act (or the Federal Water Pollution Control Act, 33 U.S.C. §1251 *et seq*)

CWT – Centralized Waste Treatment

DMR – Discharge Monitoring Report

U.S. EPA – U. S. Environmental Protection Agency

FWS – U. S. Fish and Wildlife Service

LA – Load Allocations

MDMR – MSGP Discharge Monitoring Report

MGD – Million Gallons per Day

MOS – Margin of Safety

MS4 – Municipal Separate Storm Sewer System

MSDS – Material Safety Data Sheet

MSGP – Multi-Sector General Permit

NAICS – North American Industry Classification System

NMFS – U. S. National Marine Fisheries Service

NOI – Notice of Intent

NOT – Notice of Termination

NPDES – National Pollutant Discharge Elimination System

NRC – National Response Center

NTU – Nephelometric Turbidity Unit

OMB – U. S. Office of Management and Budget

ORW – Outstanding Resource Water

OSM – U. S. Office of Surface Mining

POTW – Publicly Owned Treatment Works

RCRA – Resource Conservation and Recovery Act

RQ – Reportable Quantity

SARA – Superfund Amendments and Reauthorization Act

SIC – Standard Industrial Classification

SMCRA – Surface Mining Control and Reclamation Act

SPCC – Spill Prevention, Control, and Countermeasures

SWPPP – Storm Water Pollution Prevention Plan

TMDL – Total Maximum Daily Load

TSDF – Treatment, Storage, or Disposal Facility

TSS – Total Suspended Solids

USGS – United States Geological Survey

WLA – Wasteload Allocation

WQS – Water Quality Standard

## National Pollutant Discharge Elimination System (NPDES) Permit Program

### FACT SHEET

Regarding an NPDES Permit to Discharge to Waters of the State of Ohio  
for the **Northeast Ohio Regional Sewer District (NEORS) Easterly Wastewater Treatment Plant**

Public Notice No.: 17-12-018  
Public Notice Date: December 12, 2017  
Comment Period Ends: January 12, 2018

OEPA Permit No.: 3PF00001\*MD  
Application No.: OH0024643

Name and Address of Applicant:

Northeast Ohio Regional Sewer District  
3900 Euclid Avenue  
Cleveland, OH 44115

Name and Address of Facility Where  
Discharge Occurs:

Northeast Ohio Regional Sewer District  
Easterly Wastewater Treatment Plant (WWTP)  
1401 Lakeshore Boulevard  
Cleveland, OH 44110

Receiving Water: **Lake Erie**

Subsequent Stream Network: **NA**

### INTRODUCTION

Development of a Fact Sheet for NPDES permits is mandated by Title 40 of the Code of Federal Regulations (CFR), Section 124.8 and 124.56. This document fulfills the requirements established in those regulations by providing the information necessary to inform the public of actions proposed by the Ohio Environmental Protection Agency (Ohio EPA), as well as the methods by which the public can participate in the process of finalizing those actions.

This Fact Sheet is prepared in order to document the technical basis and risk management decisions that are considered in the determination of water quality based NPDES Permit effluent limitations. The technical basis for the Fact Sheet may consist of evaluations of promulgated effluent guidelines, existing effluent quality, instream biological, chemical and physical conditions, and the relative risk of alternative effluent limitations. This Fact Sheet details the discretionary decision-making process empowered to the Director by the Clean Water Act (CWA) and Ohio Water Pollution Control Law (Ohio Revised Code [ORC] 6111). Decisions to award variances to Water Quality Standards (WQS) or promulgated effluent guidelines for economic or technological reasons will also be justified in the Fact Sheet where necessary.

No antidegradation review was necessary.

Effluent limits based on available treatment technologies are required by Section 301(b) of the CWA. Many of these have already been established by the United States Environmental Protection Agency (U.S. EPA) in the effluent guideline regulations (a.k.a. categorical regulations) for industry categories in 40 CFR Parts 405-499. Technology-based regulations for publicly-owned treatment works are listed in the Secondary Treatment Regulations (40 CFR Part 133). If regulations have not been established for a category of dischargers, the director may establish technology-based limits based on best professional judgment (BPJ).

Ohio EPA reviews the need for water-quality-based limits on a pollutant-by-pollutant basis. Wasteload allocations (WLAs) are used to develop these limits based on the pollutants that have been detected in the discharge, and the receiving water's assimilative capacity. The assimilative capacity depends on the flow in the water receiving the discharge, and the concentration of the pollutant upstream. The greater the upstream flow,

and the lower the upstream concentration, the greater the assimilative capacity is. Assimilative capacity may represent dilution (as in allocations for metals), or it may also incorporate the break-down of pollutants in the receiving water (as in allocations for oxygen-demanding materials).

The need for water-quality-based limits is determined by comparing the WLA for a pollutant to a measure of the effluent quality. The measure of effluent quality is called Projected Effluent Quality (PEQ). This is a statistical measure of the average and maximum effluent values for a pollutant. As with any statistical method, the more data that exists for a given pollutant, the more likely that PEQ will match the actual observed data. If there is a small data set for a given pollutant, the highest measured value is multiplied by a statistical factor to obtain a PEQ; for example, if only one sample exists, the factor is 6.2, for two samples - 3.8, for three samples - 3.0. The factors continue to decline as samples sizes increase. These factors are intended to account for effluent variability, but if the pollutant concentrations are fairly constant, these factors may make PEQ appear larger than it would be shown to be if more sample results existed.

## **SUMMARY OF PERMIT CONDITIONS**

The effluent limits and monitoring requirements proposed for the following parameters are the same as in the current permit, although some monitoring frequencies may have changed: flow, temperature, 5-day carbonaceous biochemical oxygen demand (CBOD<sub>5</sub>), total suspended solids (TSS), ammonia, nitrite+nitrate, oil and grease, pH, cadmium, chromium, copper, dissolved hexavalent chromium, free cyanide, lead, nickel, zinc, dissolved oxygen (DO), phosphorus, *Escherichia coli*, whole effluent toxicity (WET), and total dissolved solids (TDS).

The wasteload allocation placed mercury in Group 5. The data indicates that the parameter has the reasonable potential to exceed WQS and, therefore, limits are necessary. The average concentration for mercury is proposed to be decreased in accordance with the data presented as part of the facility's mercury variance renewal request.

New effluent monitoring requirements have been added for selenium.

Due to the Whole Effluent Toxicity (WET) analysis, the existing limits for *Ceriodaphnia dubia* are proposed to continue.

This permit no longer authorizes the use of method 4500 CN-I from Standard Methods for free cyanide testing. As soon as possible, the permittee must begin using either ASTM D7237-10 or OIA-1677-09 both of which are approved methods for free cyanide listed in 40 CFR 136.

The following wet-weather outfalls and/or monitoring stations have been added to the permit: 3PF00001099, 3PF00001602, and 3PF00001603. Station 3PF00001602 is being authorized for the Chemically Enhanced High Rate Treatment (CEHRT) system when it commences operation. Station 3PF00001603 is authorized for current wet weather overflows from CSO 001 and WWTP bypasses until CEHRT is operational. At that time, Station 3PF00001603 is authorized as an approved anticipated CSO-related bypass above the capacity of CEHRT.

In Part II of the permit, special conditions are included that address sanitary sewer overflow (SSO) reporting; operator certification, minimum staffing and operator of record; whole effluent toxicity (WET) testing; mercury variance; pretreatment program requirements; and outfall signage.

This permit renewal is proposed for a term of approximately 5 years.

## Table of Contents

INTRODUCTION.....	1
SUMMARY OF PERMIT CONDITIONS .....	2
PROCEDURES FOR PARTICIPATION IN THE FORMULATION OF FINAL DETERMINATIONS ..	5
INFORMATION REGARDING CERTAIN WATER QUALITY BASED EFFLUENT LIMITS .....	5
LOCATION OF DISCHARGE/RECEIVING WATER USE CLASSIFICATION .....	7
FACILITY DESCRIPTION.....	7
DESCRIPTION OF EXISTING DISCHARGE.....	11
ASSESSMENT OF IMPACT ON RECEIVING WATERS .....	11
DEVELOPMENT OF WATER-QUALITY-BASED EFFLUENT LIMITS .....	12
REASONABLE POTENTIAL/ EFFLUENT LIMITS/HAZARD MANAGEMENT DECISIONS .....	14
OTHER REQUIREMENTS.....	18

## List of Figures

Figure 1. NEORSD Service Areas .....	20
Figure 2. Location of the NEORSD Easterly WWTP.....	21
Figure 3. Diagram of Wastewater Treatment System .....	22

## List of Tables

Table 1. Sewage Sludge Removal (Station 3PF00001588) .....	23
Table 2. Average Annual Effluent Flow Rates .....	23
Table 3. Sanitary Sewer Overflows (SSO Station 3PF00001300).....	23
Table 4. Plant Bypasses.....	24
Table 5. Effluent Characterization Based on Self-Monitoring Data for Outfall 3PF00001001 .....	25
Table 6. Projected Effluent Quality for Outfall 3PF00001001 .....	28
Table 7. Summary of Effluent Toxicity Results.....	29
Table 8. Water Quality Criteria in the Study Area.....	29

Table 9. Instream Conditions and Discharger Flow .....	30
Table 10. Summary of Effluent Limits to Maintain Applicable Water Quality Criteria.....	31
Table 11. Parameter Assessment.....	32
Table 12. Final Effluent Limits and Monitoring Requirements for Outfall 3PF00001001.....	33
Table 13. Monitoring Requirements for Outfall 3PF00001002 .....	34
Table 14. Final Effluent Limits and Monitoring Requirements for Calculated Outfall 3PF00001099.....	34
Table 15. Effluent Limits and Monitoring Requirements for CEHRT Station 3PF00001602.....	36
Table 16. Monitoring Requirements for Headworks Wet Weather Overflow/Bypass Station 3PF00001603...	36

#### **List of Attachments**

Attachment 1. Supplemental NEORS D Easterly WWTP Discharge Data .....	37
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#### **List of Addendums**

Addendum 1. Acronyms .....	40
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## **PROCEDURES FOR PARTICIPATION IN THE FORMULATION OF FINAL DETERMINATIONS**

The draft action shall be issued as a final action unless the Director revises the draft after consideration of the record of a public meeting or written comments, or upon disapproval by the Administrator of the U.S. Environmental Protection Agency.

Within thirty days of the date of the Public Notice, any person may request or petition for a public meeting for presentation of evidence, statements or opinions. The purpose of the public meeting is to obtain additional evidence. Statements concerning the issues raised by the party requesting the meeting are invited. Evidence may be presented by the applicant, the state, and other parties, and following presentation of such evidence other interested persons may present testimony of facts or statements of opinion.

Requests for public meetings shall be in writing and shall state the action of the Director objected to, the questions to be considered, and the reasons the action is contested. Such requests should be addressed to:

**Legal Records Section  
Ohio Environmental Protection Agency  
P.O. Box 1049  
Columbus, Ohio 43216-1049**

Interested persons are invited to submit written comments upon the discharge permit. Comments should be submitted in person or by mail no later than 30 days after the date of this Public Notice. Deliver or mail all comments to:

**Ohio Environmental Protection Agency  
Attention: Division of Surface Water  
Permits Processing Unit  
P.O. Box 1049  
Columbus, Ohio 43216-1049**

The Ohio EPA permit number and Public Notice numbers should appear on each page of any submitted comments. All comments received no later than 30 days after the date of the Public Notice will be considered.

Citizens may conduct file reviews regarding specific companies or sites. Appointments are necessary to conduct file reviews, because requests to review files have increased dramatically in recent years. The first 250 pages copied are free. For requests to copy more than 250 pages, there is a five-cent charge for each page copied. Payment is required by check or money order, made payable to Treasurer State of Ohio.

For additional information about this fact sheet or the draft permit, contact Erm Gomes, (330) 963-1196, [Erm.Gomes@epa.ohio.gov](mailto:Erm.Gomes@epa.ohio.gov), Brianne Ciccone, (330) 963-1179, [Brianne.Ciccone@epa.ohio.gov](mailto:Brianne.Ciccone@epa.ohio.gov) or Gary Stuhlfauth, (614) 644-2026, [Gary.Stuhlfauth@ohio.epa.gov](mailto:Gary.Stuhlfauth@ohio.epa.gov).

## **INFORMATION REGARDING CERTAIN WATER QUALITY BASED EFFLUENT LIMITS**

This draft permit may contain proposed water-quality-based effluent limits (WQBELs) for parameters that **are not** priority pollutants. (See the following link for a list of the priority pollutants: [http://epa.ohio.gov/portals/35/pretreatment/Pretreatment\\_Program\\_Priority\\_Pollutant\\_Detection\\_Limits.pdf](http://epa.ohio.gov/portals/35/pretreatment/Pretreatment_Program_Priority_Pollutant_Detection_Limits.pdf) .) In accordance with ORC 6111.03(J)(3), the Director established these WQBELs after considering, to the extent consistent with the Federal Water Pollution Control Act, evidence relating to the technical feasibility and economic reasonableness of removing the polluting properties from those wastes and to evidence relating to



conditions calculated to result from that action and their relation to benefits to the people of the state and to accomplishment of the purposes of this chapter. This determination was made based on data and information available at the time the permit was drafted, which included the contents of the timely submitted NPDES permit renewal application, along with any and all pertinent information available to the Director.

This public notice allows the permittee to provide to the Director for consideration during this public comment period additional site-specific pertinent and factual information with respect to the technical feasibility and economic reasonableness for achieving compliance with the proposed final effluent limitations for these parameters. The permittee shall deliver or mail this information to:

**Ohio Environmental Protection Agency  
Attention: Division of Surface Water  
Permits Processing Unit  
P.O. Box 1049  
Columbus, Ohio 43216-1049**

Should the applicant need additional time to review, obtain or develop site-specific pertinent and factual information with respect to the technical feasibility and economic reasonableness of achieving compliance with these limitations, written notification for any additional time shall be sent to the above address no later than 30 days after the Public Notice Date on Page 1.

Should the applicant determine that compliance with the proposed WQBELs for parameters other than the priority pollutants is technically and/or economically unattainable, the permittee may submit an application for a variance to the applicable WQS used to develop the proposed effluent limitation in accordance with the terms and conditions set forth in OAC 3745-33-07(D). The permittee shall submit this application to the above address no later than 30 days after the Public Notice Date.

Alternately, the applicant may propose the development of site-specific WQS pursuant to OAC 3745-1-35. The permittee shall submit written notification regarding their intent to develop site specific WQS for parameters that are not priority pollutants to the above address no later than 30 days after the Public Notice Date.

## **LOCATION OF DISCHARGE/RECEIVING WATER USE CLASSIFICATION**

The NEORSD Easterly WWTP discharges to Lake Erie via Outfall 3PF00001001 at approximately Lake Mile 1179.65 (41° 34' 27" N; 81° 35' 16" W).

This segment of Lake Erie is described by Ohio EPA River Code: 24-600, Lake Erie Assessment Unit 24001002, County: Cuyahoga, and Ecoregion: Eastern Great Lakes and Hudson Lowlands. Lake Erie is designated for the following uses under Ohio's Water Quality Standards (OAC 3745-1-31): Exceptional Warmwater Habitat (EWH), Superior High Quality Water, Agricultural Water Supply (AWS), Industrial Water Supply (IWS), Public Water Supply (PWS), and Bathing Waters (BW).

Use designations define the goals and expectations of a waterbody. These goals are set for aquatic life protection, recreation use and water supply use, and are defined in the Ohio WQS (OAC 3745-1-07). The use designations for individual waterbodies are listed in rules -08 through -32 of the Ohio WQS. Once the goals are set, numeric water quality standards are developed to protect these uses. Different uses have different water quality criteria.

Use designations for aquatic life protection include habitats for coldwater fish and macroinvertebrates, warmwater aquatic life and waters with exceptional communities of warmwater organisms. These uses all meet the goals of the federal Clean Water Act. Ohio WQS also include aquatic life use designations for waterbodies which cannot meet the Clean Water Act goals because of human-caused conditions that cannot be remedied without causing fundamental changes to land use and widespread economic impact. The dredging and clearing of some small streams to support agricultural or urban drainage is the most common of these conditions. These streams are given Modified Warmwater or Limited Resource Water designations.

Recreation uses are defined by the depth of the waterbody and the potential for wading or swimming. Uses are defined for bathing waters, swimming/canoeing (Primary Contact) and wading only (Secondary Contact) - generally waters too shallow for swimming or canoeing).

Water supply uses are defined by the actual or potential use of the waterbody. Public Water Supply designations apply near existing water intakes so that waters are safe to drink with standard treatment. Most other waters are designated for agricultural and industrial water supply.

## **FACILITY DESCRIPTION**

The Northeast Ohio Regional Sewer District's service area includes the City of Cleveland and all or part of 61 suburban municipalities in Cuyahoga and Summit counties. Three wastewater treatment plants (Easterly and Westerly in Cleveland, and Southerly in Cuyahoga Heights), and associated interceptor sewers, serve more than one million residents in these areas (See Figure 1). The approximate location of the NEORSD Easterly WWTP is shown in Figure 2.

The NEORSD Easterly WWTP serves a population of greater than 300,000 on the east side of Cleveland and all or parts of the following neighboring suburbs: Beachwood, Bratenahl, Cleveland Heights, East Cleveland, Euclid, Gates Mills, Highland Heights, Lyndhurst, Mayfield Heights, Mayfield Village, Pepper Pike, Richmond Heights, Shaker Heights, South Euclid, University Heights, and Willoughby Hills. The

collection system is comprised of both separate sanitary sewers (approx. 64.3%) and combined sewers (approx. 35.7%). Wastewater flows to the Easterly WWTP through three major interceptor sewers: the Collinwood Interceptor, serving the northeast portions of Cleveland; the Easterly Interceptor, serving the downtown Cleveland area; and the Heights-Hilltop Interceptor (HHI), serving much of Cleveland's eastern suburbs. Combined sewer overflows (CSOs) within NEORSD's service area are regulated under NPDES Permit No. OH0043991/Ohio EPA Permit No. 3PA00002.

The existing 155 MGD facility provides treatment for an average daily flow rate of 80 - 100 MGD, with peak capacities of 400 MGD. The treatment processes include the following majors process operations (See Figure 3):

- Screening
- Grit Removal
- Primary Settling
- Phosphorus Removal (Ferric Chloride Addition)
- Conventional Activated Sludge Biological Treatment Process
- Final Settling
- Chlorination and Dechlorination
- Outfall Pumping
- Sludge Storage

The treated effluent is discharged at the Lake Erie shoreline via Outfall 3PF00001001.

During excessive wet weather events, flows exceeding the hydraulic capacity of the secondary treatment process can be discharged to Lake Erie via NPDES Outfall 3PF00001002.

Both primary sludge and waste activated sludge are collected, stored, and pumped to the NEORSD Southerly Wastewater Treatment Center via a 16-inch force main for further processing. Table 1 lists the quantity of sewage sludge removed from the facility for the past 4 years.

The primary water supply source for the area is Lake Erie.

NEORSD implements an Ohio EPA-approved industrial pretreatment program. Based on information in the NPDES renewal application, there are 37 categorical and 7 non-categorical significant industrial users presently discharging to the NEORSD Easterly WWTP. The total industrial flow is approximately 2.07 MGD.

NEORSD is implementing an approved Long-Term Control Plan (LTCP) as required under the July 7, 2011 approved federal court Consent Decree (U.S. District Court, Northern District of Ohio, Case no. 1:10 CV2895-DCN). The Consent Decree contains a long-term schedule to control discharges of untreated sewage during wet weather events from the respective NEORSD treatment plants and CSOs. The LTCP includes the following specific control measures at the NEORSD Easterly WWTP:

- Control Measure 1 (CM1) - Increase secondary treatment capacity to a sustained capacity of 400 MGD and eliminate the primary effluent bypass (Outfall 3PF00001003). Among other things, the improvements to the secondary treatment system included:

- The construction of 6 new Final Settling Tanks
- Modifications to the existing Aeration Tanks
- Addition of density current baffles to the existing 20 Final Settling Tanks
- New return activated sludge pumps
- New ferric chloride and polymer chemical feed systems
- Enhanced disinfection capabilities

Substantial completion of the necessary plant improvements was completed in 2016. Final compliance with this control measure is expected to be achieved during 2017.

- Control Measure 2 (CM2) - Provide treatment and high rate disinfection of CSO 001 flows up to 400 MGD peak inflow and achieve specified TSS and *E. coli* control.

To facilitate construction of CM1, capital improvements were also made to the plant headworks, screening and grit systems. With the completion of CM1, flows up to 400 MGD receive complete primary and secondary treatment. Outfall 3PF00001003 will remain as an emergency overflow location only.

The CEHRT system is being designed to reduce wet weather bypasses to 25 treated and two (2) partially-treated events in a “Typical Year.” Once constructed, flows exceeding 400 MGD and up to 800 MGD will be directed to the new CEHRT system and ultimately discharged via Outfall 3PF00001002. Design and construction of the CEHRT system under CM2 is expected to occur prior to expiration of the proposed permit period. As such, monitoring requirements consistent with the Performance Criteria in the Consent Decree and the LTCP will be incorporated into the proposed permit for the discharge from the CEHRT system.

In order for a bypass to be authorized as an anticipated “CSO-related bypass”, a publicly-owned treatment works (POTW) has to meet the following requirements of the bypass regulation at 40 C.F.R. 122.41(m)(4):

*(A) Bypass was unavoidable to prevent loss of life, personal injury or severe property damage;*

*(B) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and*

*(C) The permittee submitted notices as required under paragraph (m)(3) of this section.*

An anticipated bypass may be approved after considering its adverse effects. As noted above, LTCP implementation will result in the maximum volume of flow reaching the NEORS Easterly WWTP for treatment during wet weather, which is one of the primary goals of the CSO Control Policy (U.S. EPA; April 11, 1994). The CSO Control Policy provides that:

*"For the purposes of applying this regulation to CSO permittees, "severe property damage" could include situations where flows above a certain level wash out the POTW's secondary treatment system.*

*EPA further believes that the feasible alternatives requirement can be met if the record shows that the secondary treatment system is properly operated and maintained, that the system has been designed to meet secondary limits for flows greater than the peak dry weather flow, plus an appropriate quantity of wet weather flow, and that it is either technically or financially infeasible to provide secondary treatment at the existing facilities for greater amounts of wet weather flow. The feasible alternative analysis should include, for example, consideration of enhanced primary treatment (e.g. chemical addition) and non-biological secondary treatment.... As part of its consideration of possible adverse effects resulting from the bypass, the permitting authority should also ensure that the bypass will not cause exceedances of WQS."*

NEORS D has demonstrated compliance with 40 CFR 122.41(m) through the LTCP development process and conducting a satisfactory no feasible alternatives analysis. Historical records document that the facility is properly operated and maintained and meets (or exceeds) the secondary treatment limit requirements. The cut off points for diversion of excess flow from secondary treatment were evaluated as part of the LTCP. It was determined that it is technically infeasible to provide secondary treatment for additional wet weather flow and the that the bypass will not cause exceedances of WQS.

Based on the above, Ohio EPA has determined that discharges from the CEHRT system (via Internal Station 3PF00001602) to Outfall 3PF00001002 will be designated as an approved CSO-related bypass in this permit, on the basis that the bypass meets the requirements of the CSO Control Policy and 40 C.F.R. 122.41(m) and there exists a Consent Decree that establishes a compliance schedule for implementation of the LTCP. The permit prescribes the allowable flow parameters and that flow discharged from Outfall 3PF00001602 will receive a minimum of solids and floatable removal, enhanced primary clarification, and disinfection (including dechlorination).

The permit also includes a requirement that the permittee report each discharge to Outfall 3PF00001002 within 24 hours from commencement of the discharge. Furthermore, the permit provides that the approval for the CSO-related bypass will be reviewed and that it may be modified or terminated if there is a substantial increase in the volume or character of pollutants being introduced to the NEORS D Easterly WWTP

As noted above, the CEHRT system outfall (3PF00001602) will only be utilized during wet-weather conditions. Recognizing that the system will be operated as a non-continuous discharge, NEORS D has requested that the water quality based effluent limitations for *E. coli* be established as "facility-wide" limitations. In other words, NEORS D is requesting that the discharge from CEHRT (Station 3PF00001602) be "mathematically" combined with Outfall 3PF00001001 for purposes of demonstrating compliance with the *E. coli* limitations. Section 3745-33-07(A)(7) of the Ohio Administrative Code allows the Director to consider and approve such proposals:

*"The director may establish water quality-based effluent limits (WQBELs) that represent the sum of all wastestreams containing a pollutant in a discharge or group of discharges under the same NPDES permit, using the wasteload allocation (WLA) and total maximum daily load (TMDL) methods in Chapter 3745-2 of the Administrative Code and the reasonable potential procedures in rules 3745-2-06 and 3745-33-07 of the Administrative Code."*

## DESCRIPTION OF EXISTING DISCHARGE

The average annual effluent flow rate for NEORSD Easterly WWTP for the most recent five years is presented in Table 2.

NEORSD Easterly WWTP reports SSOs in the collection system at station 3PF00001300. The number of SSOs and dates recorded is presented in Table 3.

NEORSD Easterly WWTP reports plant bypasses at stations 3PF00001002 and 3PF00001003. The number of bypasses reported (by year) is presented in Table 4. The increased frequencies and volumes at these stations were attributed to reduced plant hydraulic capacity during the expansion activities.

Table 5 presents a summary of unaltered self-monitoring data from submitted Discharge Monitoring Report (DMR). Data are presented for the period August 2012 – November 2016; the current permit limits are provided for comparison.

Table 6 summarizes the chemical specific data for Outfall 3PF00001001 by presenting the average and maximum PEQ values.

Table 7 summarizes the results of acute and chronic Whole Effluent Toxicity (WET) tests of the final effluent using the water flea (*Ceriodaphnia dubia*) and fathead minnow (*Pimephales promelas*) as the test organisms.

Attachment 1 summarizes supplemental effluent discharge data submitted by NEORSD for the following parameters at Outfall 3PF00001001: antimony, arsenic, beryllium, selenium, silver, thallium.

Under the provisions of 40 CFR 122.21(j), the Director has waived the requirement for submittal of expanded effluent testing data as part of the NPDES renewal application. Ohio EPA has access to substantially identical information through the submission of annual pretreatment program reports and/or from Ohio EPA effluent testing conducted.

## ASSESSMENT OF IMPACT ON RECEIVING WATERS

The *Ohio 2016 Integrated Water Quality Monitoring and Assessment Report* lists the Lake Erie Central Basin Shoreline as impaired for the aquatic life, recreation and fish consumption uses. Monitoring to develop a comprehensive Lake Erie nearshore monitoring program was funded by a Great Lakes Restoration Initiative grant conducted from 2011-2013. Fish community sampling results were used to update assessment unit status for the 2016 *Integrated Report*. Because data assessment and analyses were still underway for this project, causes and sources were retained from the previous report and include: siltation, nutrients, exotic species and direct habitat alterations (causes) and municipal point sources, urban runoff/storm sewers, habitat modifications other than hydromodification, combined sewer overflows, streambank modification/destabilization and non-irrigated crop production (sources).

The 2016 report is available at this Ohio EPA web site:

<http://epa.ohio.gov/dsw/tmdl/OhioIntegratedReport.aspx>

## DEVELOPMENT OF WATER-QUALITY-BASED EFFLUENT LIMITS

Determining appropriate effluent concentrations is a multiple-step process in which parameters are identified as likely to be discharged by a facility, evaluated with respect to Ohio water quality criteria, and examined to determine the likelihood that the existing effluent could violate the calculated limits.

### *Parameter Selection*

Effluent data for the NEORS D Easterly WWTP were used to determine what parameters should undergo wasteload allocation. The parameters discharged are identified by the data available to the Ohio EPA - Discharge Monitoring Report (DMR) data submitted by the permittee, compliance sampling data collected by Ohio EPA, and any other data submitted by the permittee, such as priority pollutant scans required by the NPDES application or by pretreatment, or other special conditions in the NPDES permit.

The sources of effluent data used in this evaluation are as follows:

Self-monitoring Data (DMR)	August 2012 through November 2016
NEORS D Supplemental Discharge Data (Attachment 1)	August 2012 through September 2016

This data is evaluated statistically, and Projected Effluent Quality (PEQ) values are calculated for each pollutant. Average PEQ (PEQavg) values represent the 95th percentile of monthly average data, and maximum PEQ (PEQmax) values represent the 95th percentile of all data points. The PEQavg and PEQmax values are presented in Table 6.

The PEQ values are used according to Ohio rules to compare to applicable water quality standards (WQS) and allowable wasteload allocation (WLA) values for each pollutant evaluated. Initially, PEQ values are compared to the applicable average and maximum WQS. If both PEQ values are less than 25 percent of the applicable WQS, the pollutant does not have the reasonable potential to cause or contribute to exceedances of WQS, and no wasteload allocation is done for that parameter. If either PEQavg or PEQmax is greater than 25 percent of the applicable WQS, a wasteload allocation is conducted to determine whether the parameter exhibits reasonable potential and needs to have a limit or if monitoring is required. See Table 6 for a summary of the screening results.

### *Wasteload Allocation*

For those parameters that require a wasteload allocation, the results are based on the uses assigned to the receiving waterbody in OAC 3745-1. Dischargers are allocated pollutant loadings/concentrations based on the Ohio Water Quality Standards (OAC 3745-1). Most pollutants are allocated by a mass-balance method because they do not degrade in the receiving water.

By rule, mixing zones are not authorized for pollutants, such as mercury, that have been designated as bioaccumulative chemicals of concern (BCCs). For BCCs, the WLA is set equal to the respective WQS value.

WLAs for direct discharges to lakes, e.g. Lake Erie, are done using the following equation for average criteria:  $WLA = (11 \times \text{Water Quality Criteria}) - (10 \times \text{Background Concentration})$ . Allocations for

maximum criteria are set equal to the Inside Mixing Zone Maximum (IMZM) values. Except for BCCs, the values for the Outside Mixing Zone Maximum (OMZM) are left blank in Table 10 to indicate that any limits based upon a maximum WLA are actually represented by the Inside Mixing Zone Maximum criteria. The wasteload allocation values in Table 10 would allow the NEORS D Easterly WWTP to maintain all applicable water quality criteria. Allocations cannot exceed the Inside Mixing Zone Maximum criteria.

The data used in the WLA are listed in Table 8 and Table 9. The wasteload allocation results to maintain all applicable criteria are presented in Table 10.

### ***Whole Effluent Toxicity WLA***

Whole effluent toxicity (WET) is the total toxic effect of an effluent on aquatic life measured directly with a toxicity test. Acute WET measures short term effects of the effluent while chronic WET measures longer term and potentially more subtle effects of the effluent.

Water quality standards for WET are expressed in Ohio's narrative "free from" WQS rule [OAC 3745-1-04(D)]. These "free froms" are translated into toxicity units (TUs) by the associated WQS Implementation Rule (OAC 3745-2-09). Wasteload allocations can then be calculated using TUs as if they were water quality criteria.

The wasteload allocation calculations for WET are similar to those for aquatic life criteria - using the chronic toxicity unit (TU<sub>c</sub>) and the above dilution calculation for the average and setting the maximum allocation to 1.0 TU<sub>a</sub>. These values are the levels of effluent toxicity that should not cause ambient toxicity in Lake Erie. For the NEORS D Easterly WWTP, the wasteload allocation values are 1.0 TU<sub>a</sub> and 11.0 TU<sub>c</sub>.

The chronic toxicity unit (TU<sub>c</sub>) is defined as 100 divided by the IC<sub>25</sub>:

$$TU_c = 100/IC_{25}$$

This equation applies outside the mixing zone for warmwater, modified warmwater, exceptional warmwater, coldwater, and seasonal salmonid use designations except when the following equation is more restrictive (*Ceriodaphnia dubia* only):

$$TU_c = 100/\text{geometric mean of NOEC and LOEC}$$

The acute toxicity unit (TU<sub>a</sub>) is defined as 100 divided by the LC<sub>50</sub> for the most sensitive test species:

$$TU_a = 100/LC_{50}$$

This equation applies outside the mixing zone for warmwater, modified warmwater, exceptional warmwater, coldwater, and seasonal salmonid use designations.



## REASONABLE POTENTIAL/ EFFLUENT LIMITS/HAZARD MANAGEMENT DECISIONS

After appropriate effluent limits are calculated, the reasonable potential of the discharger to violate the water quality standards must be determined. Each parameter is examined and placed in a defined "group". Parameters that do not have a water quality standard or do not require a wasteload allocation based on the initial screening are assigned to either group 1 or 2. For the allocated parameters, the preliminary effluent limits (PEL) based on the most restrictive average and maximum wasteload allocations are selected from Table 10. The average PEL (PELavg) is compared to the average PEQ (PEQavg) from Table 6, and the PELmax is compared to the PEQmax. Based on the calculated percentage of the allocated value  $[(PEQ_{avg} \div PEL_{avg}) \times 100]$ , or  $[(PEQ_{max} \div PEL_{max}) \times 100]$ , the parameters are assigned to group 3, 4, or 5. The groupings are listed in Table 11.

The final effluent limits are determined by evaluating the groupings in conjunction with other applicable rules and regulations. Table 12 presents the final effluent limits and monitoring requirements proposed for the NEORSD Easterly WWTP Outfall 3PF00001001. Unless otherwise indicated, the monitoring frequencies proposed in the permit for Outfall 3PF00001001 are continued from the existing permit. In addition, Tables 13 - 16 list the effluent limits and monitoring requirements for Outfall 3PE00002002, Calculated Outfall 3PF00001099, CEHRT Station 3PF00001602, and Bypass Station 3PF00001603, respectively. Ohio EPA has determined that the proposed effluent limitations, terms, and conditions of this permit ensure compliance with applicable water quality standards.

The limits and monitoring requirements for Outfall 3PF00001001 are as follows:

### ***Flow Rate, Water Temperature, Ammonia, Dissolved Oxygen, and Escherichia (E.) coli***

Monitoring is proposed to continue for flow rate, water temperature, ammonia, and dissolved oxygen to assist in the evaluation of effluent quality and treatment plant performance. Monitoring is proposed for *E. coli*; final effluent limitations for *E. coli* are to be applied at Calculated Outfall 3PF00001099.

### ***Oil & Grease***

Limits proposed for oil and grease are based on Water Quality Standards (OAC-3745-1).

### ***pH***

The maximum limit for pH is based on Ohio water quality standards (OAC 3745-1-07) and is a continuation of the existing limit. Based on best technical judgment, the limit proposed for minimum pH, 6.0 SU, is based on the results of a July 2011 mixing zone study conducted by NEORSD and reviewed by Ohio EPA. That study demonstrated that the proposed limit is protective of the minimum water quality standard of 6.5 SU.

### ***Total Suspended Solids (TSS), 5 Day Carbonaceous Biochemical Oxygen Demand (CBOD<sub>5</sub>)***

The limits for total suspended solids (TSS) and 5-day carbonaceous biochemical oxygen demand (CBOD<sub>5</sub>) have been continued from the existing permit. These limits are based on plant design criteria. These limits are protective of WQS.

### ***Total Residual Chlorine***

The limit for total residual chlorine is proposed to continue from the existing permit as a plant design value and is necessary to protect the inside mixing zone maximum (IMZM) standard. The IMZM is the WQS value calculated to avoid rapidly lethal conditions in the effluent mixing zone. The effluent limit for chlorine at Outfall 3PF00001001 is less than the quantification level of 0.050 mg/L. However, a pollutant minimization program is not required because the dosing rate of dechlorination chemicals ensures that the water quality based effluent limit is being met. Monitoring is only required during periods of chlorine usage.

### ***Phosphorus***

Limits for phosphorus are based upon the phosphorus treatment standards in OAC 3745-33-06 (C).

### ***Dissolved Orthophosphate (aka Dissolved Reactive Phosphorus)***

Monthly monitoring is proposed for dissolved orthophosphate (as P). This monitoring is required by Ohio Senate Bill 1, which was signed by the Governor on April 2, 2015 and incorporated into ORC 6111.03. Monitoring for orthophosphate is proposed to further develop nutrient datasets for dissolved reactive phosphorus and to assist in stream and watershed assessments and studies. Ohio EPA monitoring, as well as other in-stream monitoring, are generally performed via the collection of grab samples. Thus, orthophosphate is proposed to be collected by grab sample to maintain consistent data to support watershed and stream surveys. The grab sample must be filtered within 15 minutes of collection using a 0.45-micron filter. The filtered sample must be analyzed within 48 hours of sample collection.

### ***Mercury***

The Ohio EPA risk assessment (Table 11) places mercury in group 5. This placement, as well as the data in Table 5 and Table 6, indicates that the reasonable potential to exceed WQS exists and limits are necessary to protect water quality. For this parameter, the PEQ is greater than 100 percent of the WLA. Pollutants that meet this requirement must have permit limits under OAC 3745-33-07(A)(1).

The existing NPDES permit includes a variance-based limit of 4.5 ng/L for mercury. Based on available monitoring data and new application information, NEORS D has determined that the Easterly WWTP cannot meet the 30-day average permit limit of 1.3 ng/L. However, the effluent data shows that the Easterly WWTP can meet the mercury annual average value of 12 ng/L. NEORS D submitted information supporting the renewal of the variance. The Pollutant Minimization Program (PMP) schedule developed from the original variance continues to be implemented, and further reductions in mercury may be possible.

Ohio EPA has reviewed the mercury variance information and permittee's application and has determined that the requirements of the OAC are met. The permittee has also demonstrated to the satisfaction of Ohio EPA that there is no readily apparent means of complying with the WQBEL without constructing prohibitively expensive end-of-pipe controls for mercury. Based upon these

demonstrations, the NEORSD Easterly WWTP mercury variance under OAC 3745-33-07(D)(8) is proposed to be approved and renewed.

A condition in Part II of the NPDES permit lists the provisions of the mercury variance renewal, and includes the following requirements:

- A lower variance-based monthly average effluent limit of 2.9 ng/L, based on the review of the facility's monitoring data, i.e. PEQ data (See Table 6);
- A requirement that the permittee make reasonable progress to meet the WQBEL for mercury by implementing the plan of study, which has been developed as part of the PMP;
- Low-level mercury monitoring of the plant's influent and effluent;
- A requirement that the annual average mercury effluent concentration is less than or equal to 12 ng/L as specified in the plan of study;
- A requirement to submit an annual report on implementation of the PMP; and
- A requirement for submittal of a certification stating that all permit conditions related to implementing the plan of study and the PMP have been satisfied, but that compliance with the monthly average WQBEL for mercury has not been achieved.

***Total Dissolved Solids (aka Total Filterable Residue), Copper, Free Cyanide, Hexavalent Chromium (Dissolved) and Selenium***

The Ohio EPA risk assessment (Table 11) places these parameters in group 3. This placement, as well as the data in Table 5 and Table 6, support that these parameters do not have the reasonable potential to contribute to WQS exceedances, and limits are not necessary to protect water quality. Continued monitoring is recommended for TDS, copper, free cyanide, and hexavalent chromium. New monitoring requirements are recommended for selenium.

***Antimony, Arsenic, Beryllium, Cadmium, Chromium, Lead, Nickel, Nitrate-N + Nitrite-N, Silver, Thallium, and Zinc***

The Ohio EPA risk assessment (Table 11) places these parameters in group 2. This placement, as well as the data in Table 5 and Table 6, support that these parameters do not have the reasonable potential to contribute to WQS exceedances, and limits are not necessary to protect water quality. Continued monitoring is recommended for nitrate+nitrite. Monitoring at reduced frequencies, e.g. 1/Month, is recommended for cadmium, chromium, lead, nickel, and zinc in order to document that these pollutants continue to remain at low levels. No new monitoring is proposed for antimony, arsenic, beryllium and silver.

***Total Kjeldahl Nitrogen (TKN)***

Nutrients are a source of impairment to some parts of the Lake Erie Basin Shoreline. Based on Best Technical Judgment (BTJ), monitoring is proposed to continue for total Kjeldahl nitrogen.

### ***Whole Effluent Toxicity Reasonable Potential***

Evaluating the acute and chronic toxicity results for the test organisms in Table 7 under the provisions of 40 CFR Part 132, Appendix F, Procedure 6, an acute PEQ value of 1.8 TU<sub>a</sub> and a chronic PEQ of 3.1 TU<sub>c</sub> for *C. dubia*. Reasonable potential for toxicity is demonstrated with respect to *C. dubia* since the acute PEQ exceeds the wasteload allocation value of 1.0 TU<sub>a</sub>. Consistent with Procedure 6 and OAC 3745-33-07(B), the existing monthly average limit of 11.0 TU<sub>c</sub> and a daily maximum limit of 1.0 TU<sub>a</sub> are proposed to continue for *C. dubia*. Twice per year testing is proposed to continue.

All of the reported analytical results for *P. promelas* were below the applicable method detection limits. While this indicates that the plant's effluent does not currently pose a toxicity problem, annual toxicity testing is proposed consistent with the minimum monitoring requirements at OAC 3754-33-07(B)(11). Annual chronic toxicity monitoring with the determination of acute endpoints is proposed for the life of the permit. The proposed monitoring will adequately characterize toxicity in the plant's effluent.

The limits and monitoring requirements for Internal CEHRT Station 3PF00001602 are as follows (see Table 15):

#### ***Flow Rate, 5 Day Carbonaceous Biochemical Oxygen Demand (CBOD<sub>5</sub>) Ammonia, Phosphorus, and Escherichia (E.) coli***

Monitoring is proposed to assist in the evaluation of effluent quality and limits are not necessary.

#### ***pH***

Limits proposed for pH are consistent with the justification for Outfall 3PF00001001.

#### ***Total Suspended Solids (TSS) and Total Residual Chlorine***

Limits proposed for these parameters are based on the Performance Criteria contained in the Consent Decree. The limit for total residual chlorine is necessary to protect the inside mixing zone maximum (IMZM) water quality standard.

The limits and monitoring requirements for Calculated Outfall 3PF00001099 are as follows (see Table 14):

#### ***Escherichia (E.) coli***

The calculated limits proposed for *Escherichia (E.) coli* are based on OAC-3745-1 and OAC 3745-33-07(A)(7). Bathing water *E. coli* recreational standards apply to Lake Erie. The limits represent “facility-wide” limits based on a flow-weighted average for the following outfalls (or monitoring stations): Outfall 3PF00001001 and Internal CEHRT Station 3PF00001602.

## **Additional Monitoring Requirements**

Additional monitoring requirements proposed at the final effluent, influent and upstream/downstream stations (where applicable) are included for all facilities in Ohio and vary according to the type and size of the discharge. In addition to permit compliance, this data is used to assist in the evaluation of effluent quality and treatment plant performance and for designing plant improvements and conducting future stream studies.

## **Sludge**

Limits and monitoring requirements proposed for the reuse and/or disposal of sewage sludge by the following management practices are based on OAC 3745-40: hauling (or pumping) to another NPDES-permitted facility (Station 3PF00001588).

## **OTHER REQUIREMENTS**

### **Compliance Schedule(s)**

***Pretreatment Local Limits Review*** - A compliance schedule is proposed for the NEORSD Easterly WWTP to submit a technical justification for either revising its local industrial user limits or retaining its existing local limits. Details are in Part I.C of the permit.

***Phosphorus Optimization*** - The permittee prepared and submitted a Phosphorus Discharge Optimization Evaluation plan to Ohio EPA Northeast District Office and implemented the recommended measures during the previous permit cycle. The permittee shall continue the measures which have been implemented.

### **Sanitary Sewer Overflow Reporting**

Provisions for reporting SSOs are again proposed in this permit. These provisions include: the reporting of the system-wide number of SSO occurrences on monthly operating reports; telephone notification of Ohio EPA and the local health department, and 5-day follow up written reports for certain high risk SSOs; and preparation of an annual report that is submitted to Ohio EPA and made available to the public. Many of these provisions were already required under the “Noncompliance Notification”, “Records Retention”, and “Facility Operation and Quality Control” general conditions in Part III of Ohio NPDES permits.

### **Operator Certification and Operator of Record**

Operator certification requirements have been included in Part II of the permit in accordance with OAC 3745-7-02. These rules require the NEORSD Easterly WWTP to have a Class IV wastewater treatment plant operator in charge of the sewage treatment plant operations discharging through Outfall 3PF00001001. These rules also require the permittee to designate one or more operator of record to oversee the technical operation of the “treatment works” and/or “sewerage system”.

## **Low-Level Free Cyanide Testing**

Currently there are two approved methods for free cyanide listed in 40 CFR 136.3 that have quantification levels lower than any water quality-based effluent limits:

- ASTM D7237-10 and OIA-1677-09 - Flow injection followed by gas diffusion amperometry

These methods will allow Ohio EPA to make more reliable water quality-related decisions regarding free cyanide. Because the quantification levels are lower than any water quality-based effluent limits, it will also be possible to directly evaluate compliance with free cyanide limits.

New NPDES permits no longer authorize the use of method 4500 CN-I from Standard Methods for free cyanide testing. The new permits require permittees to begin using one of these approved methods as soon as possible. If a permittee must use method 4500 CN-I during the transition to an approved method, they are instructed to report the results on their DMR and enter “Method 4500 CN-I” in the remarks section.

## **Outfall Signage**

Part II of the permit includes requirements for the permittee to place a sign at each outfall to Lake Erie providing information about the discharge. Signage at outfalls is required pursuant to Ohio Administrative Code 3745-33-08(A). Signs are not required at in-plant sampling outfalls or at outfalls that are not accessible to the public by land or by recreational use of the water body, e.g. submerged off-shore outfalls.

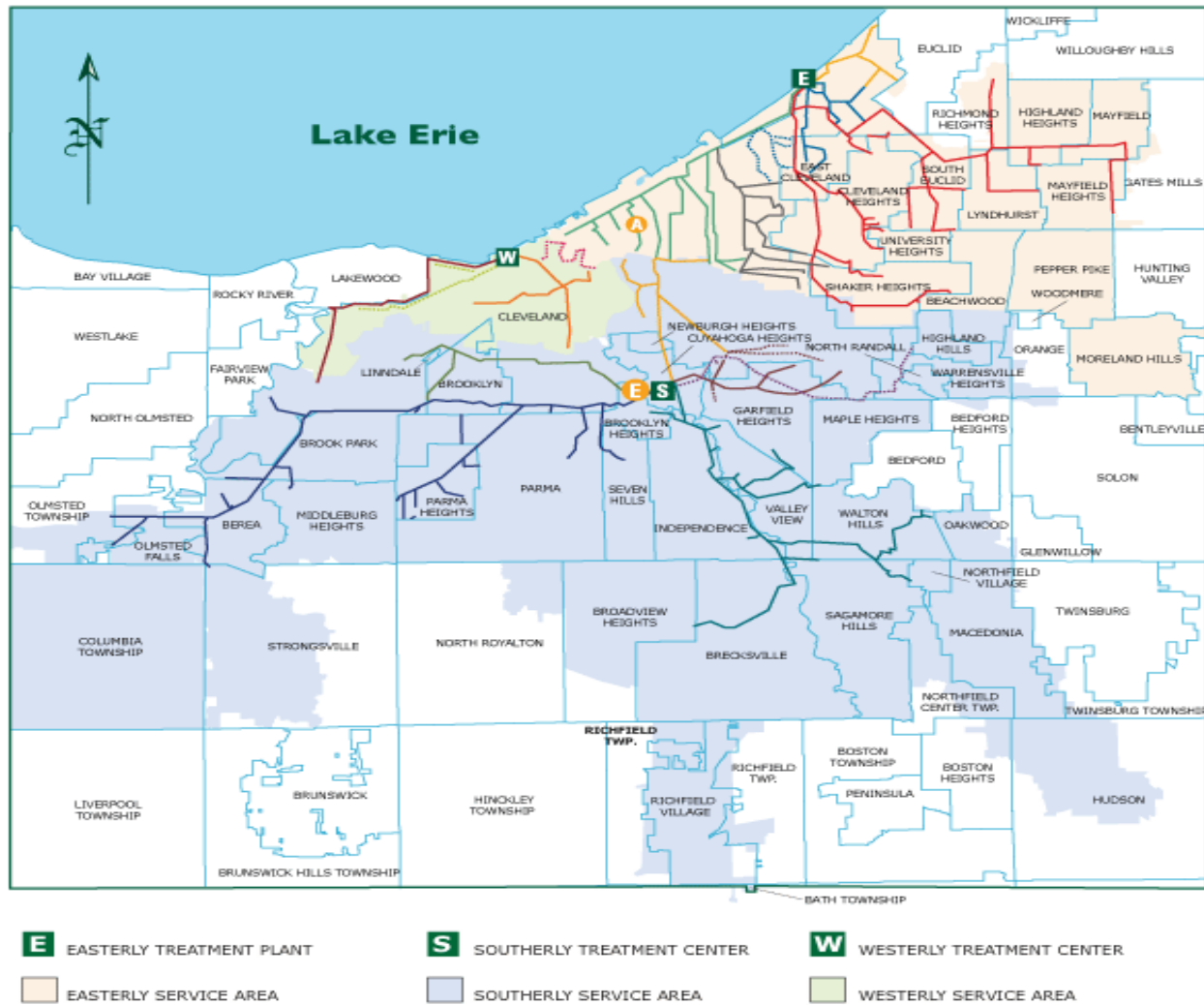
## **Part III**

Part III of the permit details generic and standard conditions that include monitoring, reporting requirements, compliance responsibilities, and general requirements.

## **Storm Water Compliance**

Parts IV, V, and VI have been included with the draft permit to ensure that any storm water flows from the facility site are properly regulated and managed. As an alternative to complying with Parts IV, V, and VI, the facility may seek permit coverage under the general permit for industrial storm water (Permit # OHR000006 or subsequent renewal) or submit a “No Exposure Certification.” Parts IV, V, and VI will be removed from the final permit if: 1) the facility submits a Notice of Intent (NOI) for coverage under the general permit for industrial storm water or submits a No Exposure Certification, 2) Ohio EPA determines that the facility is eligible for coverage under the general permit or meets the requirements for a No Exposure Certification, and 3) the determination by Ohio EPA can be made prior to the issuance of the final permit.

**Figure 1. NEORSD Service Areas**



Lake Erie

Station: 3PF00001-001

Station: 3PF00001-002

Station: 3PF00001-003

NE Ohio Regional S D Easterly STP  
QEP# 3PF00001  
USEPA# OH0024643

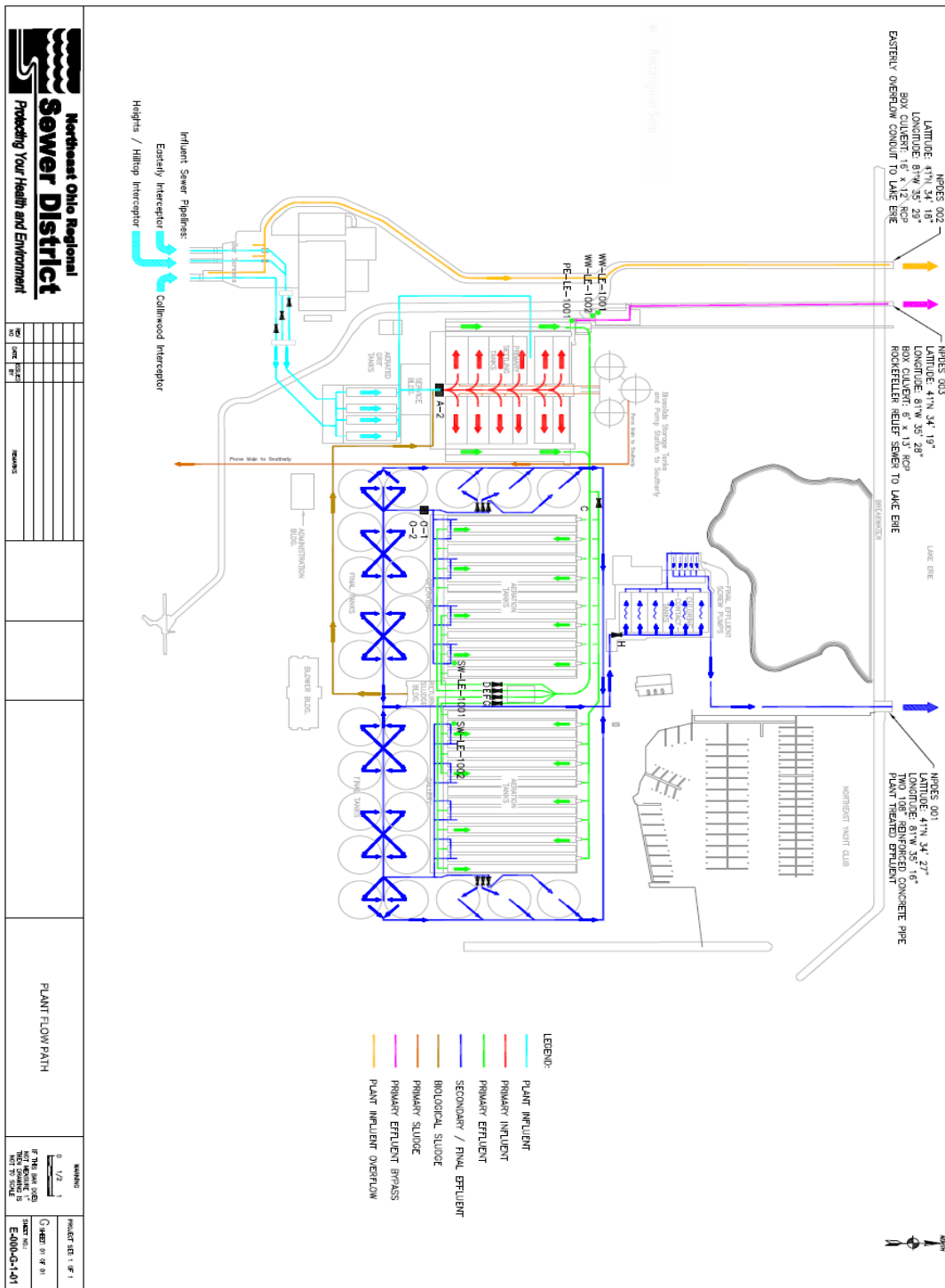
NEORS D Easterly WWTP

- NPDES - Permit Location
- NPDES - Final Outfall Stations
- Downstream-Nearfield Monitoring
- Upstream Monitoring
- Final Outfall

Map labels include: Lakeshore Dr, Othello Ave, McElhattan Ave, Westrop Ave, Sylvia Ave, 8 Waterloo Rd, Jennie Ave, Darley Ave, and various other streets like E 14th St, E 15th St, E 16th St, E 17th St, E 18th St, E 19th St, E 20th St, E 21st St, E 22nd St, E 23rd St, E 24th St, E 25th St, E 26th St, E 27th St, E 28th St, E 29th St, E 30th St, E 31st St, E 32nd St, E 33rd St, E 34th St, E 35th St, E 36th St, E 37th St, E 38th St, E 39th St, E 40th St, E 41st St, E 42nd St, E 43rd St, E 44th St, E 45th St, E 46th St, E 47th St, E 48th St, E 49th St, E 50th St, E 51st St, E 52nd St, E 53rd St, E 54th St, E 55th St, E 56th St, E 57th St, E 58th St, E 59th St, E 60th St, E 61st St, E 62nd St, E 63rd St, E 64th St, E 65th St, E 66th St, E 67th St, E 68th St, E 69th St, E 70th St, E 71st St, E 72nd St, E 73rd St, E 74th St, E 75th St, E 76th St, E 77th St, E 78th St, E 79th St, E 80th St, E 81st St, E 82nd St, E 83rd St, E 84th St, E 85th St, E 86th St, E 87th St, E 88th St, E 89th St, E 90th 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Figure 3. Diagram of Wastewater Treatment System



**Table 1. Sewage Sludge Removal (Station 3PF00001588)**

<b>Year</b>	<b>Sludge Pumped to NEORS Southerly WWTC (Dry Tons)</b>
2012	22801
2013	24360
2014	23090
2015	22590

**Table 2. Average Annual Effluent Flow Rates**

<b>Year</b>	<b>Annual Flow in MGD</b>			
	<b>50th Percentile</b>	<b>95th Percentile</b>	<b>Maximum</b>	<b>Average</b>
2012	80.2	184.2	230.8	97.664
2013	76.4	153	224.1	86.945
2014	78.3	151.32	193.2	88.334
2015	71.9	144.78	198	80.597
2016	66.2	109.22	136.7	71.156

(\*) - 8/2012 – 11/2016

**Table 3. Sanitary Sewer Overflows (SSO Station 3PF00001300)**

<b>Year</b>	<b>No. of SSO Events</b>
2012	0
2013	0
2014	0
2015	0

**Table 4. Plant Bypasses**

Outfall	Year (*)	No. of events	Bypass Volume		
			Minimum	Maximum	Mean
<b>002</b>	2012	23	0.1	471.6	72.478
	2013	59	0	207.61	26.427
	2014	70	0.68	242.18	57.295
	2015	56	0.08	366.99	65.877
	2016	57	0.01	253.37	47.175
	2012-2016	265	0	471.6	51.377
<b>003</b>	2012	22	3.2	96.6	31.682
	2013	10	3	20.4	8.07
	2015	24	3.7	73.8	19.175
	2016	28	2.3	97.1	30.464
	2012-2016	22	3.2	96.6	31.682

(\*) - 8/2012 – 11/2016

**Table 5. Effluent Characterization Based on Self-Monitoring Data for Outfall 3PF00001001**

Parameter	Season	Units	Current Permit Limits		# Obs.	Percentiles (*)(**)		Data Range
			30 day	Daily		50 <sup>th</sup>	95 <sup>th</sup>	
<b>Outfall 001</b>								
Water Temperature	Annual	C	--	--	1583	17.4	23.9	8-25
Dissolved Oxygen	Summer	mg/L	--	--	828	8.7	10.1	4.7-11.2
Dissolved Oxygen	Winter	mg/L	--	--	755	9.8	11.2	5.7-12
Total Suspended Solids	Annual	mg/L	20	30 <sup>a</sup>	1581	5	12	1-55
Oil and Grease, Hexane Extr Method	Annual	mg/L	--	10	104	1.4	3.8	0-5.8
Nitrogen, Ammonia (NH3)	Summer	mg/L	--	--	828	0.36	1.8	0.01-5.73
Nitrogen, Ammonia (NH3)	Winter	mg/L	--	--	729	0.89	3.7	0-5.84
Nitrite Plus Nitrate, Total	Annual	mg/L	--	--	1557	4.99	8.44	1.19-13.1
Phosphorus, Total (P)	Annual	mg/L	1.0	1.5 <sup>a</sup>	1557	0.348	0.825	0.067-2.07
Cyanide, Free	Annual	mg/L	--	--	101	0.0012	0.0064	0-0.0118
Nickel	Annual	µg/L	--	--	113	4.4	7.9	0-29.2
Zinc	Annual	µg/L	--	--	113	22	29	11-38
Cadmium	Annual	µg/L	--	--	113	0.08	0.442	0-1.26
Lead	Annual	µg/L	--	--	113	0.5	1.1	0-2.1
Chromium	Annual	µg/L	--	--	113	1.6	3.3	0-4.6
Copper	Annual	µg/L	--	--	113	7	11.7	0-13.2
Chromium, Dissolved Hexavalent	Annual	µg/L	--	--	102	3.4	5	0-8
Fecal Coliform	Annual	#/100 ml	--	--	276	14	1180	0-21000
E. coli	Annual	#/100 ml	126	284 <sup>a</sup>	823	8	135	0-12400
Flow Rate	Summer	MGD	--	--	828	68.7	145	47.2-231
Flow Rate	Winter	MGD	--	--	755	78.9	151	46.7-224
Flow Rate	Annual	MGD	--	--	1583	74	148	46.7-231
Chlorine, Total Residual	Annual	mg/L	--	0.038	847	0	0	0-0
Mercury, Total (Low Level)	Annual	ng/L	4.5	1700	107	1.21	3.72	0-5.61

Parameter	Season	Units	Current Permit Limits		# Obs.	Percentiles (*)(**)		Data Range
			30 day	Daily		50 <sup>th</sup>	95 <sup>th</sup>	
Acute Toxicity, Ceriodaphnia dubia	Annual	TUa	--	1.0	8	0	0.65	0-1
Chronic Toxicity, Ceriodaphnia dubia	Annual	TUc	11	--	8	0	1.6	0-1.7
Acute Toxicity, Pimephales promelas	Annual	TUa	--	--	5	0	0	0-0
Chronic Toxicity, Pimephales promelas	Annual	TUc	--	--	5	0	0	0-0
pH, Maximum	Annual	S.U.	--	9.0	1583	7.2	7.4	6.8-9.4
pH, Minimum	Annual	S.U.	--	6.0	1583	7	7.2	6.5-7.4
Residue, Total Filterable	Annual	mg/L	--	--	1128	622	1200	230-2210
CBOD 5 day	Summer	mg/L	15	22.5 <sup>a</sup>	636	3	6	0-15
CBOD 5 day	Winter	mg/L	15	22.5 <sup>a</sup>	576	4	7	0-16
<b>Outfall 002</b>								
Total Suspended Solids	Annual	mg/L	--	--	240	143	454	4-1920
E. coli	Annual	#/100 ml	--	--	61	320000	1770000	61-2600000
Overflow Occurrence	Annual	No./Month	--	--	265	1	1	0-3
Overflow Volume	Annual	Million Gallons	--	--	265	22.2	197	0-472
CBOD 5 day	Summer	mg/L	--	--	108	31.5	147	0-497
CBOD 5 day	Winter	mg/L	--	--	83	49	178	3-325
Duration of Discharge	Annual	Hours	--	--	265	4.32	16.6	0.03-24
<b>Outfall 003</b>								
Bypass Occurrence	Annual	No./Day	--	--	84	1	1	0-2

Parameter	Season	Units	Current Permit Limits		# Obs.	Percentiles (*)(**)		Data Range
			30 day	Daily		50 <sup>th</sup>	95 <sup>th</sup>	
Bypass Total Hours Per Day	Annual	Hrs/Day	--	--	84	5.53	24	1-24
Total Suspended Solids	Annual	mg/L	--	--	83	62	154	22-234
E. coli	Annual	#/100 ml	--	--	28	455000	940000	108000-1520000
Bypass Volume	Annual	MGAL	--	--	84	15.5	72.8	2.3-97.1
CBOD 5 day	Summer	mg/L	--	--	45	26	56.8	8-61
CBOD 5 day	Winter	mg/L	--	--	28	36	73.8	8-87

\* = For minimum pH, 5th percentile shown in place of 50th percentile.

\*\* = For dissolved oxygen, 5th percentile shown in place of 95th percentile.

<sup>a</sup> = weekly average.

**Table 6. Projected Effluent Quality for Outfall 3PF00001001**

<b>Parameter</b>	<b>Units</b>	<b>Number of Samples</b>	<b>Number &gt; MDL</b>	<b>PEQ Average</b>	<b>PEQ Maximum</b>
Arsenic	µg/L	104	82	1.4918	2.012
Cadmium	µg/L	113	67	0.41891	0.61957
Chlorine, Total Residual	mg/L	847	0	--	--
Chromium	µg/L	113	100	2.6829	3.7919
Hexavalent Chromium (Dissolved)	µg/L	102	93	5.3133	7.6381
Copper	µg/L	113	103	9.6953	12.804
Cyanide - free	mg/L	101	96	0.0030096	0.0045682
Dissolved Solids	mg/L	1128	1128	761.77	1104.1
Lead	µg/L	113	96	0.94549	1.3308
Mercury	ng/L	107	104	2.8764	4.3447
Nickel	µg/L	113	112	6.6281	8.6527
Nitrate-N + Nitrite-N	mg/L	1557	1557	5.8147	8.9404
Silver	µg/L	104	104	--	--
Zinc	µg/L	113	113	26.814	32.275
Selenium	µg/L	104	104	2.2523	3.3031
Antimony	µg/L	104	88	0.86458	1.2023
Beryllium	µg/L	102	0	--	--
Thallium	µg/L	103	35	0.6236	0.52724

(\*) – Supplemental data

MDL = analytical method detection limit

PEQ = projected effluent quality

**Table 7. Summary of Effluent Toxicity Results**

Date	<i>Ceriodaphnia Dubia</i>		<i>Pimephales promelas</i>	
	TU <sub>a</sub>	TU <sub>c</sub>	TU <sub>a</sub>	TU <sub>c</sub>
8/2/2012	AA	1.4	AA	AA
2/5/2013	AA	AA	--	--
8/6/2013	AA	1.12	AA	AA
2/6/2014	1	1.7	--	--
8/5/2014	AA	AA	AA	AA
2/3/2015	AA	AA	--	--
2/3/2015	AA	AA	--	--
9/21/2015	AA	AA	--	--
8/2/2016	AA	AA	AA	AA

AA = non-detection; analytical method detection limit of 0.2 TU<sub>a</sub>, 1.0 TU<sub>c</sub>

TU<sub>a</sub> = acute toxicity unit

TU<sub>c</sub> = chronic toxicity unit

**Table 8. Water Quality Criteria in the Study Area**

Parameter	Units	Outside Mixing Zone Criteria					Inside Mixing Zone Maximum
		Average				Maximum Aquatic Life	
		Wildlife	Human Health	Agri-culture	Aquatic Life		
Arsenic	µg/L	--	580	100	150	340	680
Cadmium	µg/L	--	730	50	2.8	5.5	11
Chlorine, Total Residual	mg/L	--	--	--	0.011	0.019	0.038
Chromium	µg/L	--	14000	100	99	2100	4200
Hexavalent Chromium (Dissolved)	µg/L	--	14000	--	11	16	31
Copper	µg/L	--	64000	500	11	16	33
Cyanide - free	mg/L	--	48	--	0.0052	0.022	0.044
Dissolved Solids	mg/L	--	--	--	1500	--	--
Lead	µg/L	--	--	100	8	150	310
Mercury	ng/L	1.3	3.1	10000	910	1700	3400
Nickel	µg/L	--	43000	200	60	540	1100
Nitrate-N + Nitrite-N	mg/L	--	--	100	--	--	--
Silver	µg/L	--	11000	--	1.3	2.2	4.3
Zinc	µg/L	--	35000	25000	140	140	280
Selenium	µg/L	--	3100	50	5	--	--
Antimony	µg/L	--	780	--	190	900	1800
Beryllium	µg/L	--	130 <sup>c</sup>	100	14	120	250
Thallium	µg/L	--	--	--	17	79	160

<sup>c</sup> = carcinogen



**Table 9. Instream Conditions and Discharger Flow**

Parameter	Units	Season	Value	Basis (*)
<i>Hardness, OMZ</i>	mg/L	annual	119	n = 21: Lake Erie STORET Station 301255, 301256; 2011-2013
<i>Hardness, IMZ</i>	mg/L	annual	119	n = 21: Lake Erie STORET Station 301255, 301256; 2011-2013
<i>NEORSD Easterly WWTC flow</i>	cfs	annual	239.82	NPDES Application
<i>Background Water Quality</i>				
Arsenic	µg/L		0	Ohio EPA; 2011-2015; n=12; 12<MDL; Lake Erie STORET Station 300895; Median value
Cadmium	µg/L		0	Ohio EPA; 2011-2015; n=12; 12<MDL; Lake Erie STORET Station 300895; Median value
Chlorine, Total Residual	mg/L		0	No representative data available.
Chromium	µg/L		0	Ohio EPA; 2011-2015; n=12; 12<MDL; Lake Erie STORET Station 300895; Median value
Hexavalent Chromium (Dissolved)	µg/L		0	No representative data available.
Copper	µg/L		1	Ohio EPA; 2011-2015; n=12; 9<MDL; Lake Erie STORET Station 300895; Median value
Cyanide - free	mg/L		0	No representative data available.
Dissolved Solids	mg/L		172	Ohio EPA; 2011-2015; n=29; 0<MDL; Lake Erie STORET Station 300895; Median value
Lead	µg/L		0	Ohio EPA; 2011-2015; n=12; 12<MDL; Lake Erie STORET Station 300895; Median value
Mercury	ng/L		0	No representative data available.
Nickel	µg/L		1	Ohio EPA; 2011-2015; n=12; 7<MDL; Lake Erie STORET Station 300895; Median value
Nitrate-N + Nitrite-N	mg/L		0.56	Ohio EPA; 2011-2015; n=29; 1<MDL; Lake Erie STORET Station 300895; Median value
Silver	µg/L		0	No representative data available.
Zinc	µg/L		0	Ohio EPA; 2011-2015; n=12; 12<MDL; Lake Erie STORET Station 300895; Median value
Selenium	µg/L		0	Ohio EPA; 2011-2015; n=12; 12<MDL; Lake Erie STORET Station 300895; Median value
Antimony	µg/L		0	No representative data available.
Beryllium	µg/L		0	No representative data available.
Thallium	µg/L		0	No representative data available.

(\*) STORET = STORage and RETrieval database used for the storage and retrieval of water quality and biological data

**Table 10. Summary of Effluent Limits to Maintain Applicable Water Quality Criteria**

Parameter	Units	Outside Mixing Zone Criteria					Inside Mixing Zone Maximum
		Average				Maximum Aquatic Life	
		Wildlife	Human Health	Agri-culture	Aquatic Life		
Arsenic	µg/L	--	6380	1100	1650	--	680
Cadmium	µg/L	--	8030	550	31	--	11
Chlorine, Total Residual	mg/L	--	--	--	0.12	--	0.038
Chromium	µg/L	--	154000	1100	1089	--	4200
Hexavalent Chromium (Dissolved)	µg/L	--	154000	--	121	--	31
Copper	µg/L	--	703990	5490	111	--	33
Cyanide - free	mg/L	--	528	--	0.057	--	0.044
Dissolved Solids	mg/L	--	--	--	14780	--	--
Lead	µg/L	--	--	1100	88	--	310
Mercury	ng/L	1.3	3.1	10000	910	1700	3400
Nickel	µg/L	--	472990	2190	650	--	1100
Nitrate-N + Nitrite-N	mg/L	--	--	1094	--	--	--
Silver	µg/L	--	121000	--	14	--	4.3
Zinc	µg/L	--	385000	275000	1540	--	280
Selenium	µg/L	--	34100	550	55	--	--
Antimony	µg/L	--	8580	--	2090	--	1800
Beryllium	µg/L	--	1430	1100	154	--	250
Thallium	µg/L	--	--	--	187	--	160

**Table 11. Parameter Assessment**

- Group 1: Due to a lack of criteria, the following parameters could not be evaluated at this time.
- No parameters placed into this group.
- Group 2: PEQ < 25 percent of WQS or all data below minimum detection limit. WLA not required. No limit recommended; monitoring optional.
- |                       |           |                          |
|-----------------------|-----------|--------------------------|
| Arsenic               | Cadmium   | Chlorine, Total Residual |
| Chromium              | Lead      | Nickel                   |
| Nitrate-N + Nitrite-N | Silver    | Zinc                     |
| Antimony              | Beryllium | Thallium                 |
- Group 3: PEQ<sub>max</sub> < 50 percent of maximum PEL and PEQ<sub>avg</sub> < 50 percent of average PEL. No limit recommended; monitoring optional.
- |                                 |          |                |
|---------------------------------|----------|----------------|
| Hexavalent Chromium (Dissolved) | Copper   | Cyanide - free |
| Dissolved Solids                | Selenium |                |
- Group 4: PEQ<sub>max</sub> ≥ 50 percent, but < 100 percent of the maximum PEL or PEQ<sub>avg</sub> ≥ 50 percent, but < 100 percent of the average PEL. Monitoring is appropriate.
- No parameters placed into this group.
- Group 5: Maximum PEQ ≥ 100 percent of the maximum PEL or average PEQ ≥ 100 percent of the average PEL, or either the average or maximum PEQ is between 75 and 100 percent of the PEL and certain conditions that increase the risk to the environment are present. Limit recommended.

Limits to Protect Numeric Water Quality Criteria

<i>Parameter</i>	<i>Units</i>	<i>Recommended Effluent Limits</i>	
		<i>Average</i>	<i>Maximum</i>
Mercury	ng/L	1.3	1700

PEL = preliminary effluent limit  
PEQ = projected effluent quality  
WLA = wasteload allocation  
WQS = water quality standard

**Table 12. Final Effluent Limits and Monitoring Requirements for Outfall 3PF00001001**

Parameter	Units	Concentration		Loading (kg/day) <sup>a</sup>		Basis <sup>b</sup>
		30 Day Average	Daily Maximum	30 Day Average	Daily Maximum	
Water Temperature	°C	----- Monitor -----				M <sup>c</sup>
Flow Rate	MGD	----- Monitor -----				M <sup>c</sup>
Peak Flow Rate	MGD	----- Monitor -----				M <sup>c</sup>
pH (Minimum)	SU	--	6.0	--	--	BTJ/WQS
pH (Maximum)	SU	--	9.0	--	--	WQS
Dissolved Oxygen	mg/L	----- Monitor -----				BTJ
Total Suspended Solids	mg/L	20	30 <sup>d</sup>	11734	17600 <sup>d</sup>	PD
Oil & Grease	mg/L	--	10	--	--	PD/WQS
Ammonia (as N) – Summer	mg/L	----- Monitor -----				BTJ
Ammonia (as N) - Winter	mg/L	----- Monitor -----				BTJ
Total Kjeldahl Nitrogen	mg/L	----- Monitor -----				BTJ
Nitrate+Nitrite (as N)	mg/L	----- Monitor -----				BTJ
Phosphorus	mg/L	1.0	1.5 <sup>d</sup>	587	880 <sup>d</sup>	PTS
Dissolved Orthophosphate (as P)	mg/L	----- Monitor -----				SB1
Total Filterable Residue	mg/L	----- Monitor -----				BTJ
Nickel	µg/L	----- Monitor -----				BTJ
Zinc	µg/L	----- Monitor -----				BTJ
Cadmium	µg/L	----- Monitor -----				BTJ
Lead	µg/L	----- Monitor -----				BTJ
Chromium	µg/L	----- Monitor -----				BTJ
Copper	µg/L	----- Monitor -----				BTJ
Hexavalent Chromium (Dissolved)	µg/L	----- Monitor -----				BTJ
Selenium	µg/L	----- Monitor -----				BTJ
Mercury	ng/L	2.9	1700	0.0017	1.0	VAR/WLA
Free Cyanide	µg/L	----- Monitor -----				BTJ
Chlorine, Total Residual	mg/L	--	0.038	--	--	WQS
<i>E. coli</i>	#/100 mL	-	-	--	--	BTJ
Carbonaceous Biochemical Oxygen Demand (5 day)	mg/L	15	22.5 <sup>d</sup>	8800	13200 <sup>d</sup>	PD
Acute Toxicity						
<i>Ceriodaphnia dubia</i>	TU <sub>a</sub>	--	1.0	--	--	WET/ RP
<i>Pimephales promelas</i>	TU <sub>a</sub>	--	--	--	--	WET
Chronic Toxicity						
<i>Ceriodaphnia dubia</i>	TU <sub>c</sub>	11.0	--	--	--	WET/ RP
<i>Pimephales promelas</i>	TU <sub>c</sub>	--	--	--	--	WET

<sup>a</sup> Effluent loadings based on average design discharge flow of 155 MGD.

<sup>b</sup> Definitions: BTJ = Best Technical Judgment  
M = Division of Surface Water NPDES Permit Guidance 1: Monitoring frequency requirements for Sanitary Discharges  
OAC = Ohio Administrative Code  
PD = Plant Design (OAC 3745-33-05(E))  
PTS = Phosphorus Treatment Standards (OAC 3745-33-06 (C))  
RP = Reasonable Potential for requiring water quality-based effluent limits and monitoring requirements in permits (OAC 3745-33-07(A))  
SB1 = Implementation of Senate Bill 1 [ORC 6111.03]  
VAR = Mercury variance (OAC 3745-33-07(D)(10)(a))  
WET = Minimum testing requirements for whole effluent toxicity [OAC 3745-33-07(B)(11)]  
WET/RP = Requiring water quality-based effluent limits and monitoring requirements for whole effluent toxicity in NPDES permits [40 CFR Part 132, Appendix F, Procedure 6 and OAC 3745-33-07(B)]  
WLA = Wasteload Allocation procedures (OAC 3745-2)  
WQS = Ohio Water Quality Standards (OAC 3745-1)

<sup>c</sup> Monitoring of flow and other indicator parameters is specified to assist in the evaluation of effluent quality and treatment plant performance.

<sup>d</sup> 7-day average limit.

**Table 13. Monitoring Requirements for Outfall 3PF00001002**

Parameter	Units	Concentration		Loading (kg/day)		Basis <sup>a</sup>
		30 Day Average	Daily Maximum	30 Day Average	Daily Maximum	
Flow Volume	Million Gallons	----- Monitor -----				BTJ
Duration of Discharge	Hours	----- Monitor -----				BTJ

Note: This outfall represents the combined discharge from Station 3PF00001602 and Station 3PF00001603.

<sup>a</sup> Definitions: BTJ = Best Technical Judgment

**Table 14. Final Effluent Limits and Monitoring Requirements for Calculated Outfall 3PF00001099**

Parameter	Units	Concentration		Loading (kg/day)		Basis <sup>a</sup>
		30 Day Average	Daily Maximum	30 Day Average	Daily Maximum	
<i>E. coli</i> <sup>a</sup>	#/100 mL	126	284 <sup>b</sup>	--	--	WQS
Flow Rate	MGD	----- Monitor -----				BTJ

Note: The *E. coli* effluent limits represent a flow-weighted average for the following outfalls (or monitoring stations): Outfall 3PF00001001 and CEHRT Station 3PF00001602. Daily reporting

for this calculated station is required during the summer months when wastewater is discharged from Station 3PF00001602 to Outfall 3PFE00001002.

<sup>a</sup> Definitions:        WQS = Ohio Water Quality Standards (OAC 3745-1)  
                              BTJ = Best Technical Judgment

<sup>b</sup> 7-day average limit.

**Table 15. Effluent Limits and Monitoring Requirements for CEHRT Station 3PF00001602**

Parameter	Units	Concentration		Loading (kg/day)		Basis <sup>a</sup>
		30 Day Average	Daily Maximum	30 Day Average	Daily Maximum	
E. coli	#/100 mL	----- Monitor -----				BTJ
CBOD 5 day	mg/L	----- Monitor -----				BTJ
Total Suspended Solids	mg/L	--	40	--	--	PD
Flow Rate	MGD	----- Monitor -----				BTJ
pH	S.U.	6.0 – 9.0		--	--	BTJ/WQS
Ammonia (as N)	mg/L	----- Monitor -----				BTJ
Phosphorus	mg/L	----- Monitor -----				BTJ
Chlorine, Total Residual	mg/L	--	0.038	--	--	PD,WQS
Duration of Discharge	Hours	----- Monitor -----				BTJ

<sup>a</sup> Definitions:      BTJ = Best Technical Judgment  
                              PD = Plant Design (OAC 3745-33-05(E))  
                              WQS = Ohio Water Quality Standards (OAC 3745-1)

**Table 16. Monitoring Requirements for Headworks Wet Weather Overflow/Bypass Station 3PF00001603**

Parameter	Units	Concentration		Loading (kg/day)		Basis <sup>a</sup>
		30 Day Average	Daily Maximum	30 Day Average	Daily Maximum	
Total Suspended Solids	mg/L	----- Monitor -----				BTJ
E. coli	#/100 mL	----- Monitor -----				BTJ
Bypass Volume	Million Gallons	----- Monitor -----				BTJ
Bypass Occurrence	#/day	----- Monitor -----				BTJ
CBOD 5 day	mg/L	----- Monitor -----				BTJ
Bypass Hours	Hours/day	----- Monitor -----				BTJ

<sup>a</sup> Definitions:      BTJ = Best Technical Judgment

**Attachment 1. Supplemental NEORSO Easterly WWTP Discharge Data**

Date	Parameter (µg/L)					
	Silver	Arsenic	Beryllium	Antimony	Selenium	Thallium
8/6/2012	AA (0.12)	0.54	AA (0.12)	AA (0.61)	1.275	AE
8/20/2012	AA (0.12)	AA (0.31)	AA (0.12)	AA (0.61)	0.93	AA (1.11)
9/3/2012	AA (0.12)	0.52	AA (0.12)	AA (0.61)	AA (0.63)	2.21
9/15/2012	AA (0.12)	1.105	AA (0.12)	AA (0.61)	1.15	1.5
11/12/2012	AA (0.066)	1.545	AA (0.13)	0.711	AA (2.5)	0.166
11/26/2012	AA (0.066)	1.522	AA (0.13)	0.6	AA (2.5)	0.207
10/3/2012	AA (0.07)	1.438	AA (0.13)	0.773	AA (2.5)	AA (0.15)
12/10/2012	AA (0.066)	1.227	AA (0.13)	0.858	AA (2.5)	AA (0.15)
12/24/2012	AH	AH	AH	AH	AH	AH
1/1/2013	AA (0.066)	1.139	AA (0.13)	0.461	AA (2.5)	AA (0.15)
1/15/2013	AA (0.066)	0.923	AA (0.13)	0.752	AA (2.5)	AA (0.15)
2/5/2013	0.088	1.29	AA (0.13)	0.773	AA (2.5)	AA (0.15)
2/19/2013	AA (0.066)	1.283	AA (0.13)	0.91	AA (2.5)	AA (0.15)
3/5/2013	AA (0.066)	0.804	AA (0.13)	0.57	AA (2.5)	AA (0.15)
3/19/2013	0.073	1.167	AA (0.13)	0.602	AA (2.5)	AA (0.15)
4/2/2013	AA (0.066)	1.304	AA (0.126)	0.498	AA (2.46)	AA (0.16)
4/16/2013	AA (0.066)	1.058	AA (0.126)	0.522	AA (2.46)	AA (0.16)
5/7/2013	AA (0.066)	1.469	AE	0.873	AA (2.46)	AA (0.16)
6/4/2013	AA (0.066)	1.07	AA (0.126)	1.494	AA (2.46)	AA (0.16)
6/18/2013	AA (0.066)	1.223	AA (0.126)	0.805	AA (2.46)	AA (0.16)
7/2/2013	AA (0.066)	1.476	AA (0.126)	0.794	AA (2.46)	AA (0.16)
7/16/2013	AA (0.066)	1.175	AA (0.126)	1.009	AA (2.46)	AA (0.16)
8/6/2013	AA (0.038)	1.356	AA (0.2)	0.539	AA (0.66)	AA (0.6)
8/20/2013	AA (0.038)	1.379	AA (0.2)	0.179	AA (0.66)	AA (0.6)
9/3/2013	AA (0.038)	1.349	AA (0.2)	0.647	AA (0.66)	AA (0.6)
9/4/2013	AA (0.62)	1.27	AA (0.18)	AH	AA (3.8)	1.15
9/17/2013	AA (0.038)	1.068	AA (0.2)	1.299	AA (0.66)	AA (0.6)
10/1/2013	AA (0.038)	0.807	AA (0.2)	1.272	AA (0.66)	AA (0.6)
10/15/2013	AA (0.038)	1.072	AA (0.2)	0.742	AA (0.66)	AA (0.6)
11/5/2013	AA (0.038)	1.565	AA (0.2)	0.788	AA (0.66)	AA (0.6)
11/19/2013	AA (0.038)	1.211	AA (0.2)	0.804	AA (0.66)	AA (0.6)
12/3/2013	AA (0.038)	1.358	AA (0.2)	0.374	AA (0.66)	AA (0.6)
12/17/2013	AA (0.038)	0.492	AA (0.2)	0.89	AA (0.66)	AA (0.6)
1/8/2014	AA (0.038)	0.506	AA (0.2)	0.412	AA (0.66)	AA (0.6)
1/21/2014	AA (0.038)	1.05	AA (0.2)	0.478	AA (0.66)	AA (0.6)
2/6/2014	0.044	1.079	AE	0.634	AA (0.66)	AA (0.6)



Date	Parameter (µg/L)					
	Silver	Arsenic	Beryllium	Antimony	Selenium	Thallium
2/18/2014	AA (0.052)	1.102	AA (0.084)	0.465	0.533	AA (0.138)
3/4/2014	AA (0.052)	1.113	AA (0.084)	0.876	0.51	0.437
3/18/2014	AA (0.052)	1.041	AA (0.084)	0.533	1.016	AA (0.138)
4/1/2014	AA (0.052)	1.244	AA (0.084)	AE	0.98	AA (0.138)
4/15/2014	AA (0.052)	1.318	AA (0.084)	0.783	0.787	AA (0.138)
5/6/2014	AA (0.052)	1.34	AA (0.084)	0.527	0.666	AA (0.138)
5/20/2014	AA (0.052)	1.184	AA (0.084)	0.699	0.647	AA (0.138)
6/3/2014	AA (0.052)	1.206	AA (0.084)	0.561	0.64	AA (0.138)
6/17/2014	AA (0.052)	1.101	AA (0.084)	0.778	AA (0.28)	AA (0.138)
7/1/2014	AA (0.052)	1.093	AA (0.084)	2.113	0.314	AA (0.138)
7/15/2014	AA (0.052)	1.083	AA (0.084)	0.828	AA (0.28)	AA (0.138)
8/5/2014	AA (0.026)	1.439	AA (0.11)	0.639	AA (1.26)	0.076
8/19/2014	0.035	1.251	AA (0.11)	0.81	AA (1.26)	0.23
9/2/2014	AA (0.026)	1.393	AA (0.11)	0.512	AA (1.26)	0.058
9/8/2014	AA (0.62)	2.41	AA (0.18)	AA (2.6)	AA (3.8)	AA (0.74)
9/16/2014	0.039	1.276	AA (0.11)	0.818	AA (1.26)	0.068
10/7/2014	AA (0.026)	1.19	AA (0.11)	0.622	AA (1.26)	0.069
10/21/2014	0.048	0.562	AA (0.11)	0.502	AA (1.26)	0.12
11/4/2014	AA (0.013)	1.693	AA (.055)	0.264	0.826	0.06
11/18/2014	AA (0.026)	0.783	AA (0.11)	0.569	AA (1.26)	0.097
12/2/2014	AA (0.026)	0.768	AA (0.11)	0.467	AA (1.26)	AA (0.01)
12/16/2014	0.031	0.888	AA (0.11)	0.581	AA (1.26)	AA (0.01)
1/6/2015	AA (0.026)	1.076	AA (0.11)	0.424	AA (1.26)	0.019
1/20/2015	AA (0.026)	0.612	AA (0.11)	0.419	AA (1.26)	0.024
2/3/2015	0.039	0.685	AA (0.11)	0.405	AA (1.26)	0.029
2/17/2015	0.046	0.977	AA (0.11)	0.567	AA (1.26)	0.07
3/3/2015	0.046	0.708	AA (0.11)	0.678	AA (1.26)	0.01
3/17/2015	0.03	0.931	AA (0.108)	0.468	AA (0.76)	0.025
4/7/2015	0.021	0.729	AA (0.108)	0.651	AA (0.76)	0.014
4/21/2015	0.029	0.77	AA (0.108)	0.55	AA (0.76)	0.014
5/5/2015	0.02	AA (0.64)	AA (0.108)	0.547	AA (0.76)	0.018
5/19/2015	0.028	1.09	AA (0.108)	0.547	AA (0.76)	0.016
6/2/2015	0.028	1.299	AA (0.108)	0.726	AA (0.76)	0.109
6/16/2015	0.027	1.771	AA (0.108)	0.877	AA (0.76)	0.038
7/7/2015	0.028	1.55	AA (0.054)	.564	0.963	0.068
7/21/2015	AA (0.018)	1.432	AA (0.108)	0.487	AA (0.76)	0.068
8/4/2015	0.02	1.025	AA (0.108)	0.634	AA (0.76)	0.05
8/18/2015	AA (0.009)	1.847	AA (0.054)	0.442	0.726	AA (0.007)

Date	Parameter (µg/L)					
	Silver	Arsenic	Beryllium	Antimony	Selenium	Thallium
9/1/2015	0.036	1.61	AA (0.108)	0.532	AA (0.76)	0.018
9/2/2015	AA (0.59)	AA (1.1)	AA (0.12)	AA (1.67)	AA (2.96)	AA (1.44)
9/15/2015	0.031	1.511	AA (0.108)	0.628	AA (0.76)	0.057
10/6/2015	AA (1.21)	AA (1.08)	AA (0.4)	AA (1.93)	AA (2.44)	AA (1.79)
10/20/2015	AA (1.21)	AA (1.08)	AA (0.22)	AA (1.93)	AA (2.44)	AA (1.79)
11/3/2015	AA (1.21)	AA (1.08)	AA (0.22)	AA (1.93)	AA (2.44)	AA (1.79)
11/17/2015	AA (1.21)	AA (1.08)	AA (0.22)	AA (1.93)	AA (2.44)	AA (1.79)
12/1/2015	AA (1.21)	AA (1.08)	AA (0.22)	AA (1.93)	AA (2.44)	AA (1.79)
12/15/2015	AA (1.21)	1.16	AA (0.22)	AA (1.93)	AA (2.44)	AA (1.79)
1/5/2016	AA (0.018)	0.958	AA (0.108)	0.278	AA (0.76)	AA (0.014)
1/19/2016	0.024	0.702	AA (0.108)	0.486	AA (0.76)	AA (0.014)
2/2/2016	0.046	1.398	AA (0.108)	0.359	AA (0.76)	AA (0.014)
2/16/2016	0.126	0.702	0.108	0.542	AA (0.76)	0.358
3/1/2016	0.043	1.359	AA (0.108)	0.462	AA (0.76)	0.057
3/15/2016	0.021	1.185	AA (0.108)	0.556	AA (0.76)	0.019
4/5/2016	0.024	AA (0.64)	AA (0.108)	0.37	AA (0.76)	0.05
4/19/2016	AA (0.228)	AA (2)	AA (0.218)	0.39	AA (1.034)	AA (0.236)
5/3/2016	AA (0.228)	AA (2)	AA (0.218)	0.54	AA (1.034)	AA (0.236)
5/17/2016	AA (0.228)	AA (2)	AA (0.218)	0.669	AA (1.034)	AA (0.236)
6/7/2016	AA (0.228)	AA (2)	AA (0.218)	0.462	AA (1.034)	AA (0.236)
6/21/2016	AA (0.228)	AA (2)	AA (0.218)	0.372	AA (1.034)	AA (0.236)
7/5/2016	AA (0.228)	AA (2)	AA (0.218)	0.612	AA (1.034)	AA (0.236)
7/19/2016	AA (0.228)	AA (2)	AA (0.218)	0.545	AA (1.034)	AA (0.236)
8/2/2016	AA (0.228)	AA (2)	AA (0.218)	0.41	AA (1.034)	AA (0.236)
8/15/2016	AA (0.228)	AA (2)	AA (0.218)	0.564	AA (1.034)	AA (0.236)
8/16/2016	AA (0.228)	AA (2)	AA (0.218)	0.418	AA (1.034)	AA (0.236)
9/1/2016	AA (0.228)	AA (2)	AA (0.218)	0.329	AA (1.034)	AA (0.236)
9/1/2016	AA (0.228)	AA (2)	AA (0.218)	0.341	AA (1.034)	AA (0.236)
9/6/2016	AA (1.21)	1.65	AA (0.22)	AA (1.93)	AA (2.44)	AA (1.79)
9/15/2016	AA (0.228)	AA (2)	AA (0.218)	0.503	AA (1.034)	AA (0.236)
9/20/2016	AA (1.21)	AA (1.08)	AA (0.22)	AA (1.93)	AA (2.44)	AA (1.79)

## Addendum 1. Acronyms

ABS	Anti-backsliding
BPJ	Best professional judgment
CFR	Code of Federal Regulations
CMOM	Capacity Management, Operation, and Maintenance
CONSWLA	Conservative substance wasteload allocation
CSO	Combined sewer overflow
CWA	Clean Water Act
DMR	Discharge Monitoring Report
DMT	Dissolved metal translator
IMZM	Inside mixing zone maximum
LTCP	Long-term Control Plan
MDL	Analytical method detection limit
MGD	Million gallons per day
NPDES	National Pollutant Discharge Elimination System
OAC	Ohio Administrative Code
Ohio EPA	Ohio Environmental Protection Agency
OMZM	Outside mixing zone maximum
ORC	Ohio Revised Code
ORSANCO	Ohio River Valley Water Sanitation Commission
PEL	Preliminary effluent limit
PEQ	Projected effluent quality
PMP	Pollution Minimization Program
PPE	Plant performance evaluation
SSO	Sanitary sewer overflow
TMDL	Total Daily Maximum Load
TRE	Toxicity reduction evaluation
TU	Toxicity unit
U.S. EPA	United States Environmental Protection Agency
WET	Whole effluent toxicity
WLA	Wasteload allocation
WPCF	Water Pollution Control Facility
WQBEL	Water-quality-based effluent limit
WQS	Water Quality Standards
WWTP	Wastewater Treatment Plant